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# The National Locksmith®

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No. 9  
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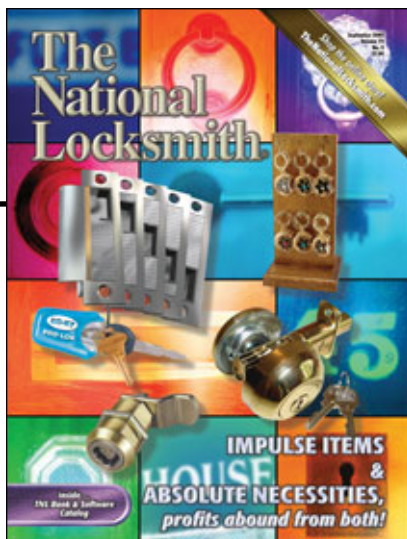


inside...  
TNL Book & Software  
Catalog

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&  
ABSOLUTE NECESSITIES,**  
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## On The Cover...



A well stocked store offers impulse items such as those by Avco Key Supply and PRO-LOK, to the necessary hardware by Securitron, Kwikset, Videx and more.

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# CONTENTS

The National Locksmith September 2002 • Vol. 73, No. 9

## FEATURES

### COVER FEATURE! 20

#### Securitron's Mortise UnLatch®

*Going beyond the cylindrical lock.*

### 22

#### Glynn-Johnson Standalone Holder/Release

*Battery powered holder/release  
smoke detector.*

### 24

#### The 2001 Dodge Stratus, Part 2

*Covering the door lock, boot lock,  
glove box lock and programming  
procedures.*

### 36

#### Quick Entry

*Saab 9-3 and 9-5.*

### 40

#### Gun Locks

*The impact of gun safety legislation.*

### 42

#### Phoenix Safe International, LLC

*Company traces its  
history back to 1799.*

### 51

#### Sentry "D" Safes

*What's a Grade D?*

### 54

#### Kwikset's UltraMax Deadbolt

*A Grade 1 for Kwikset.*

### 64

#### Key Chains And Key Accessory Merchandising

*Ideas and how to get started.*

### 69

#### Keys And Key Accessories

*Great impulse products.*

### 88

#### 2000 Kawasaki Concours, Part 2

*We conclude covering the seat,  
ignition/steering, and luggage locks.*

### **CODES** 103

#### Toyota, Part 7

*50001-69999.*

## DEPARTMENTS

5 COMMENTARY

6 MANGO'S MESSAGE

8 LETTERS

10 SECURITY CAFÉ

46 BEGINNER'S CORNER

49 THE LIGHTER SIDE

78 TECHNITIPS

112 BUSINESS BRIEFS

118 TEST DRIVE



# COMMENTARY



## How they do it down under

As you may know, *The National Locksmith* has readers all over the world, including Australia and New Zealand. One of the major differences between locksmithing in the United States and in those countries is the way in which you become a locksmith in the first place.

Here, you need a business card and in some places a license. Of course, without skill, capital and a customer base you may not last long in business. But it's not too difficult to get started since there are very few, if any, requirements. In Australia and New Zealand, though, you must apprentice with a recognized locksmith company for four years before you can be licensed.

Years ago, in that area of the world, locksmithing was recognized as a profession like others in this country which require more background and training, such as plumbing for example. State sponsored schools, such as TAFE in Australia, give courses in locksmithing, while the student serves the practical apprenticeship with an established business.

This process could seem restrictive to an American locksmith. At the same time, it means that by the time a student can call himself a locksmith, he or she has received a vast amount of training in the industry and is quite qualified to serve as a valued staff member. In fact, apprentices are paid throughout much of the process, partially subsidized by a government program which assists the employing (training) company.

Since most all locksmiths in that part of the world know one another, it behooves an apprentice to work hard and become a valued team member. Dishonest, lazy or ineffective apprentices will not be later hired by their original sponsor, and in fact could find it very difficult to ever be employed by any of the other companies as well.

Certainly, this method of entering the trade has some advantages. You receive long term, excellent training. You're paid through the process. The employer has incentives to help you progress, and has first shot at good new employees. Plus, this assists in keeping fly-by-night operators out of the field, helping to make the trade more professional overall.

At the same time, some of us here might find the practice a bit restrictive. We're more accustomed to simply being able to open any business we wish without undue interference. Yet, we could all agree that locksmithing involves public safety at least as much as does plumbing, and that's a controlled trade.

No matter how or where you enter the field of locksmithing, though, only with talent, skill and decent business sense will your business prosper. Many classes in the trade offer technical training. Avail yourself of those opportunities, and a business class or two sure wouldn't hurt either.

By the way, those of you in Aussie and NZ, see you guys in March of 2003!



Have questions? Want free technical help?  
Free Locksmith Forums!

[www.TheNationalLocksmith.com](http://www.TheNationalLocksmith.com)

**Marc Goldberg**  
Publisher



# Mango's Message

**H**ave you had a lackluster sales and service year, or a blockbuster year? If sales are down for you, don't feel bad, because you are not alone. If sales are up for you, you should be proud, because you are doing something right.

Many have been hit by the economic slowdown, the stock market slump, corporate corruption and the aftermath of 9/11. The result has been massive layoffs, buying skepticism, insecurity and a bear market, none of which contribute to the success of a business. It is during these times when the adaptable savvy businessmen shine, while the unyielding plodders struggle.

I have a very close friend that I briefly visited with at this past ALOA convention in Rosemont, IL. During our visit he seemed rather agitated, unfocused and depressed. When I asked why, he said that in the past week he lost 3 or 4 of his biggest accounts to foreclosures or corporate buyouts, and wasn't sure what he was going to do or how he would survive the loss of income. It was quite obvious that the news hit him pretty hard, so much so that he was contemplating getting out of the business.

He asked me what he could do, or should do to keep the business going. I just looked at him blankly, as if I didn't have an answer and shrugged my shoulders in apathetic silence. It wasn't that I didn't have an answer or opinion, it's just that I knew what he didn't want to hear, which is just what I wanted to say. At the time my advice would have been of little use, because he really didn't want to be offered suggestions on what to do, he just wanted things to be as they were so he could plod along in a predictable manner. Had I offered my advice, he wouldn't have done it anyway, so why bother.

Change is a difficult thing to accept, and not something he was ready for at the time. Maybe he will be now.

If you find yourself in a similar situation as my friend and want some advice, this is what I would suggest.

First ask yourself, "What are my business strengths and weaknesses?" Write the answers down on two pieces of paper, one titled "Strengths" one titled "Weaknesses." If you are not honest with your answers, you will only be cheating yourself.

Next throw the sheet of paper titled "Strengths" away. It's your weaknesses that need improving. Hopefully it is a short list.

For the sake of argument, let's say one business or service weakness is you don't do safe work, which happens to be one of my friends. The obvious answer is to

## How's Business?

take a class on basic safe lock service and combination lock changing. That alone will constitute about 50% of the safe service calls you will get. Have you ever thought about a safe moving class? It's a service few locksmiths offer, so there should be little competition.

Are you doing access control or electronic security? How about automotive transponder service, door service and installation or hinge replacement? There are several avenues that offer such classes, and each one I mentioned can be lucrative.

I could go through a whole list of money making opportunities, but the key is to get an education in the areas which are currently weak or nonexistent. Just as in the stock market, diversification is the key. While one stock loses, another stock gains. If you are a one-dimensional person, you are always going to have obstacles that limit you. We are all unable to overcome that which we are not experienced or educated in. The more areas you are versed in, the more obstacles you can overcome.

The locksmith businesses I know that are flourishing are the ones that will, and can, do almost any job that comes their way. It may not all be "lock work" but it pays the bills.

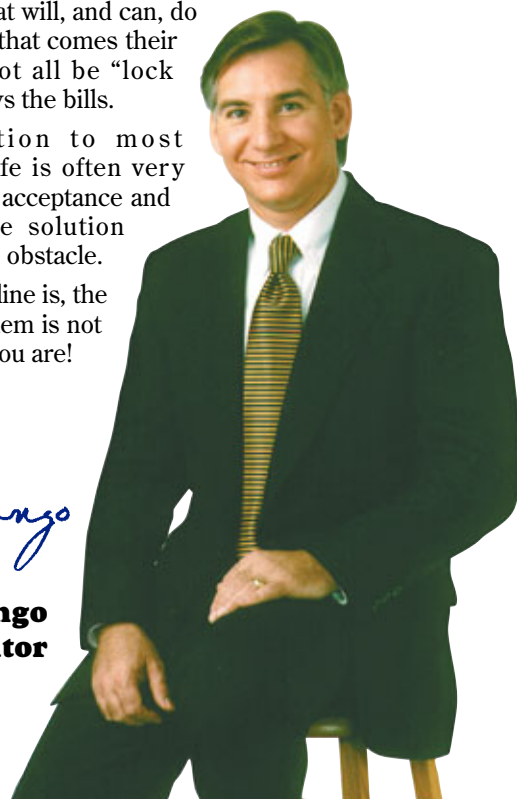
The solution to most problems in life is often very simple. It's the acceptance and practice of the solution that is often the obstacle.

The bottom line is, the perceived problem is not the obstacle... you are!

TNL

*Greg Mango*

**Greg Mango**  
**Editor**





September 2002

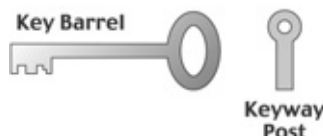
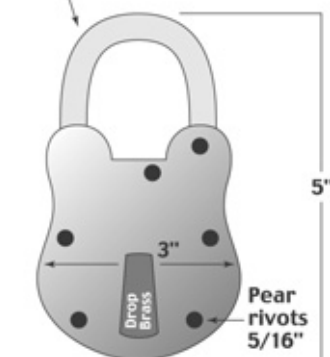
# Letters

*The National Locksmith* is interested in your view. We do reserve the right to edit for clarity and length.

## Do You Recognize?

### All Steel

Shackle  
Diameter  
1/2" Round



- Lock thickness: 1-1/8"
- Case thickness: 3/16"
  - 6 Front Rivots
  - 10 Back Rivots
- Weight: 2 lbs.

**The National Locksmith**  
1533 Burgundy Parkway  
Streamwood, IL 60107  
Attn: Editor

I need help and information about this padlock in the drawing. Do you recognize the maker, date, and value of this lock? There is no name or number anywhere on it.

Also, I have an antique padlock by Jack Robert, CML 1990 Book. Are there any new ones and if so, how many and what is the cost?

*Ed Miller  
New York*

## Funky Car

Thought you might like to take a look at a photograph of a car I had the privilege of making a key for.



Some kind of a Dodge!

*Dennis Hendricks  
Missouri*

## Weiser Trick

I really enjoy your magazine and the huge amount of information I get from it. In fact, the other night I called my wife at home after getting to a job on a Weiser lock and remembering there was a tech tip about Weiser knob picking. She got the magazine and relayed the information and made my day.

Take care and keep up the good work.

*Perry Colton  
Idaho*

## 18 Years of Memories

Due to recurring health problems, Michael Hines had to close his locksmith business in August 2001. We want to thank you

## E-MAIL YOUR VIEWS!

**NATLLOCK@aol.com**

Remember to include your first and last name.



for all of your support and help over the last 18 years. All of you were always so helpful and friendly no matter how silly you thought our questions were.

Thank you.

*Ginger Hines  
Indiana*

## Thanks for the Prize

I would like to thank Jake, Wedgeco, and *The National Locksmith* for the Wedgeco prize I received for a recently published tip. I have used the Wedgeco Broken Key Extractor Kit for some time and was glad to get another for my second work vehicle. I appreciate *The National Locksmith* and it is my top choice of locksmith magazines. It is a great source of information for the locksmith. I always enjoy helping other locksmiths myself and have had several new locksmiths express their appreciation for the tech-tips each month. I wish I could have had access to something similar when I was first starting out. I am also sending Wedgeco a letter to thank them for the nice prize.

*Clarence "Sonny" White  
Illinois*





# Security Café

**DROP IN FOR  
TOOLS, TECHNOLOGY  
& EQUIPMENT**

## New Door Jak™ Product Line from Hardnox LLC

Hardnox LLC, the creator of the Door Jak, announced the product launch of the Door Jak™ 50, a sturdy, portable door cart for installing residential and commercial doors designed with workmen's safety and efficiency in mind. The Door Jak is the only door installation cart that allows one worker to safely transport and install heavy doors of all types. It weighs 60 lbs and folds for easy transport to and from job sites and facility areas. It is a rugged tool, easy to use, rated to handle steel, fire



rated, solid core, and commercial grade doors up to 250 lbs.

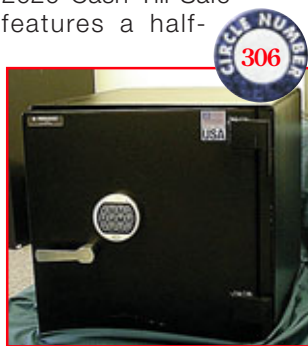
The Company also manufactures the Door Jak 100, a heavy-duty full-featured commercial door cart with the capacity to carry up to 750 lbs. or more. Both Door Jaks allow one worker to safely remove or install large and oversized doors, thus reducing the risk of injury while increasing productivity.

Hardnox LLC also announced the launch of its North American Dealer Program. The new program

for the Door Jak 50 is now in place to distribute the Door Jak with an attractive price point and supports the dealers with sales materials and technical support.

## Perma-Vault Cash Till Safe

Perma-Vault Safe Company's "B" Rate PV 2020 Cash Till Safe features a half-



inch thick steel door with bolt work and quarter-inch thick steel body and weighs a nominal 265 pounds. The safe has outside dimensions of 20"h x 20"w x 20"d and inside dimensions of 19-1/2"h x 19-1/2"w x 17-1/2"d.

Available with either a digital electronic lock or dial combination lock, the safe has four holes in the bottom to secure it to the floor.

## Kaba Ilco 1100 Series Blockers

Kaba Ilco Corporation, now offers the 1100 series Blocker. A heavy steel latch guard that provides solid protection against intruders attempting to gain access by attacking the latch through the gap between the door and the frame. Easily installed on a wide variety of wood and metal doors, each of the three models is available in two finishes.

On any emergency exit door, the latch is usually

## Videx Cam-Style CyberLocks

Videx's CyberLock® technology has been incorporated into a line of *electronic cam lock cylinders* that are ideal for cabinets, cash drawers, arcade and vending machines. The cam locks join the CyberLock family of intelligent cylinders that are designed to convert existing mechanical locks into a full-functioning access control system, all without hardwiring or the need to completely change existing hardware.

CyberLock electronic cylinders have intelligence and are capable of retaining access passwords, a lost key list, and an 1100-event audit trail that records user IDs, entry dates and times. The CyberKey® is where battery power and access privileges are found. The CyberKey records an 1150-event history that includes a lock cylinder ID, user ID, and entry date and time. The CyberKey can be programmed to grant authorized users access for pre-selected times and dates. In addition, the CyberKey can be set with an activation and expiration date to prevent users from gaining access before or after their project has been completed.



more vulnerable to attack from the exterior. The Ilco Blocker line of latch guards provides that extra layer of security.

## Folger Adam 100 Series

The Folger Adam 100 Series strikes, featuring the 110 and 110-75 strikes, are low profile strikes that work

well with narrow doorframes and are easily changeable from Fail Safe to Fail Secure. The 110 electric strike is for use with bored locks and mortise locks without deadbolts that have a 3/4-inch throw latch. Optional features on both include lip extensions and weather resistance. Faceplates are available in aluminum or dark bronze.

The units pass UL tests for 1500 lbs. static force and 70 lbs. dynamic force and have an internally mounted, continuous-duty rated solenoid.

## SDC EMLocks Meet UL 10C Test

All SDC electromagnetic locks now comply with positive pressure





## SECURITY CAFÉ

### Continued from page 10

requirements of UL 10C and are classified in accordance with UBS (Uniform Building Code)



Standard 7, Section 2, "Fire Test of Door Assemblies" designed to increase protection of life and property in a fire. The Emlock design also eliminates the need for unsightly black epoxy and potential for toxic fumes in a fire.

SDC Emlock's are Listed in UL categories Auxiliary

Lock and Burglary Resistant Electrically Operated Locks. Available in 1650 lbs., 1200 lbs. and 650 lbs. holding force. SDC Emlocks are BHMA certified as meeting ANSI holding force requirements.

### Herculock Solid-Brass Padlocks

Fast delivery and all-climate endurance make Herculock solid brass padlocks affordable answers for myriad utility, agricultural, petrochemical and industrial security applications. Weather-ready solid-brass design eliminates the possibility of corrosion damage due to salt spray, acid rain and other environmental pollution. The pin tumbler padlocks can be



keyed alike, differently or matched to user's existing padlocks - and shipped in only two weeks.

The rugged padlocks are available in width from 1-1/8 to 2-1/6", with shackle clearances from 7/8 to 8" and shackle diameters from 3/16 to 5/16". Rust-proof lock shackles are made from brass or 300-series stainless. Pin-model padlocks are also available for newspaper racks, coin vending machines, meters, valves, etc.

All internal lock components are precision machined from brass or stainless for maximum corrosion resistance, then graphite-coated for long-term lubrications and smooth operation without lubricant freeze-up. Lock bodies also have a drop hole to prevent moisture entrapment,

eliminating the possibility of internal component freeze-up.

### Jensen 8 - Piece Needle File Kit

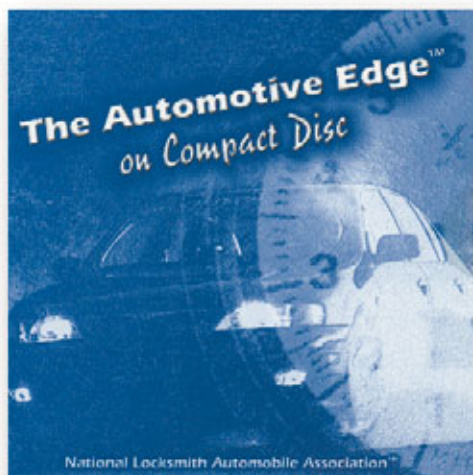
Jensen Tools Inc., offers an 8-piece Needle File Kit featuring a selection of top-quality Number 2 cut (medium) Grobet Swiss needle files in a



vinyl storage pouch. Included in the set is one each of the following files: round, square, three square, equaling, crossing, warding, half round, and knife. All of the tools carry Jensen's lifetime guarantee.

Jensen's latest master catalog offers the kit in two

**Continued on page 16**



## AutoEdge

This CD contains over 1,200 pages of automotive locksmith service.

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#AE - CD



## SECURITY CAFE

**Continued from page 14**  
models with 4" or 6-1/4" files.

### Marks USA Grade One Mortise Locks

Marks USA, has now standardized their lock using investment cast stainless for both the latch and deadbolt. The latch is assembled with steel friction proof fingers enabling reduced pressure to close



the door. The deadbolt is constructed with two hardened steel pins to resist sawing. By utilizing stainless steel for the deadbolt, the lock will now qualify for use in most prison systems where mortise locks are required. In addition to these

lock components Marks also has standardized the use in stainless steel on most of its commercial knob and lever designs.

### PRO-LOK Key King 7

The Key King 7 contains 7 multi purpose tools: large gripping pliers, fine gripping pliers, wire strippers, wire cutter, large Phillips screwdriver, small Phillips screwdriver, large standard screwdriver, small standard screwdriver and interlocking key ring holder. Tools lock horizontally in handle so they will not collapse during



use. The Key King 7 weighs only 1.4 ounces and features solid stainless steel

construction. Tools can withstand 90 lbs. of down force on handles. The rivets will shear before handles or jaw will break. The wire cutters can easily cut 12-gauge electrical wire. Jaws are perfectly aligned to illustrate quality. End of fine pliers can be used as tweezers.

A Teflon coating protects metal against acid (sweat) in your hands and also has a self-lubrication feature - the more you use the tool, the smoother it will work. It comes with a protective pouch and interlocking key ring holder to attach easily to your key ring. The Key King 7 comes with a Lifetime warranty.

### Sargent & Greenleaf Ezkeypad

Ezkeypad is the latest in a long line of innovative security devices created by Sargent & Greenleaf, Inc.



The Ezkeypad offers several new



features, most notable is the design of its battery loading system. The battery of Ezkeypad is contained in a cartridge that slides into a compartment beneath the keypad. The Ezkeypad battery can be changed in 10 seconds or less. Just pull the tab on the bottom of the keypad to release the cartridge, replace the old battery with a fresh one, and insert the cartridge back into the keypad. Because the wires are not exposed, they can't be damaged in the process of changing the battery.

The new location of the battery allows users to

**Continued on page 18**

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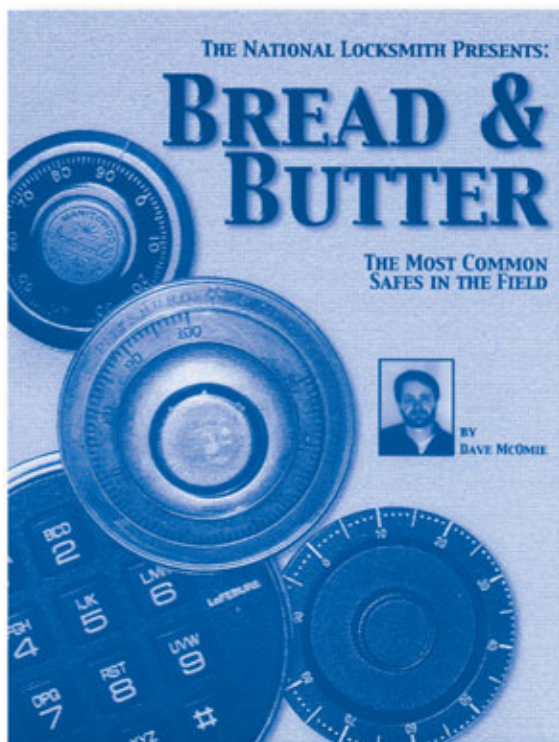
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# Bread & Butter



Now here is one amazing value!

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#BB - 01

## Continued from page 16

change the batteries without having to remove the keypad. The keypad remains permanently fixed to the base, making the unit more tamper-resistant. The Ezkeypad also features an angled keypad face for easier viewing.

### Darex Corporation Drill Sharpener



Darex Corporation now offers the AP5100 Auto Precision drill sharpener. The AP5100 is equipped with a dedicated point angle of 118° or 135° and features automatic alignment and sharpening of drill bits ranging in size for 1/16 to 1-inch.

The AP5100 is a micro-controlled drill sharpener with multi-language LCD

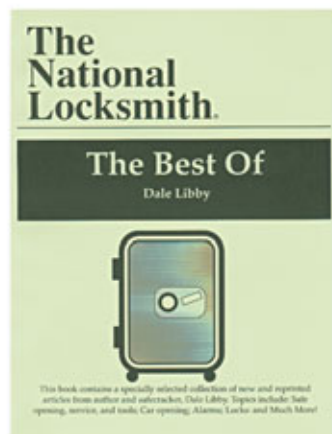
panel displaying the status as the operator sets or changes the relief or material removal. The drill point specifications and sharpening parameters are stored in the computer's memory and are easily accessed or changed.

Designed to reduce operator fatigue and increase productivity, the AP5100 automatically positions the drill in the drill chuck with a unique computer controlled, pneumatic process. Once positioned, the chuck is moved to the sharpening port where the automated sharpening process rotates the chuck until the programmed amount of material is removed. Removing user influence from the sharpening process ensures consistent results.



TRL

# The Best of Dale Libby



This book includes the best articles written by Dale Libby over the course of many years, going back well over ten years! Now you can have this terrific collection of safe opening articles, automotive articles, and more.

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#DALE



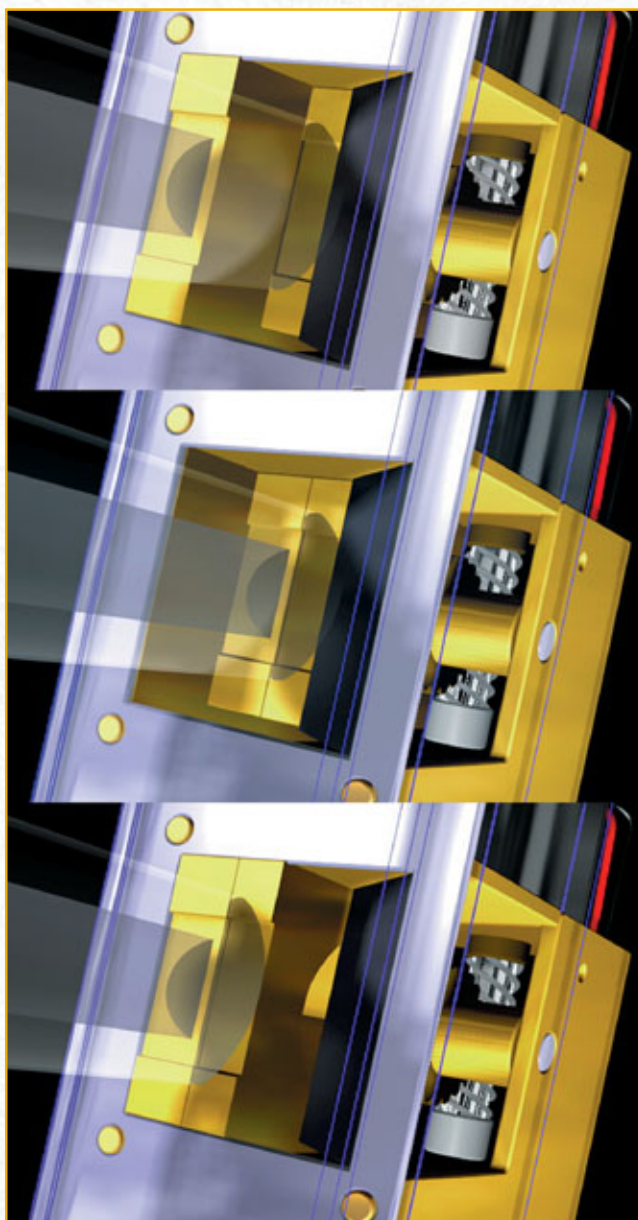
# SECURITRON's MORTISE UNLATCH®

**T**hroughout its history, Securitron has become known as a problem solver within the security industry. The solutions have taken the form of everything from the Magnalock® series of electromagnetic locks to the unparalleled MagnaCare® Lifetime Replacement Warranty. In 1999, the company addressed the problems that traditional electric strikes present to electric locking.

Electric strikes are sometimes inaccurately referred to as electric locking devices when, in fact, they are door latch releasing devices. The security effect comes from the fact that the latch is mechanically locked from the outside, anyone trying to enter is unable to turn the door knob or door lever. When someone pulls on the door in an attempt to open it, the door is held secure by the latch hitting a pivoting plate called the keeper, which is the crucial component within an electric strike. When the electric strike is activated, the keeper is electrically released so that it pivots out of the way of the latch and the door may be opened. The door remains locked mechanically. The doorknob is never turned from the outside and the latch is never retracted. From the inside, however, free exit is possible by simply turning the doorknob and retracting the latch because the electric strike is not activated and the keeper stays in place.

In contrast to electronic strikes that utilize a keeper, the original UnLatch® is designed without a keeper, instead using a motor driven plunger to push the latch back into the lock body. By redesigning the strike without a keeper, the Securitron engineers not only created an electronic strike that could withstand pre-loading but they also made it possible to fit an electronic strike in a standard 4-7/8" cutout. However, the original UnLatch® was designed for only one type of lock - the cylindrical or tubular type of lock.

After receiving overwhelming response to the original UnLatch®, Securitron realized there was no electronic strike that would work just as easily with a completely different set of latches- the mortise-types. Unlike a cylindrical or tubular type lock, a mortise lock includes a latch and separate deadlatch pin. When the lock is in the closed position, the latch is extended, thereby securing the door with the latch internally pinned by the deadlatch pin. (See photograph 1.) While this makes for a very



1. Unlike a cylindrical or tubular type lock, a mortise lock includes a latch and separate deadlatch pin.



secure type of latch, there is no standard of design, and the result is a staggering array of latch and deadlatch pin configurations within a standard 4-7/8" strike size. With the lack of uniform mortise-type locks, conventional mortise electric strikes come in a complex array of models which can be confusing and costly to inventory. Preliminary designs of the Mortise UnLatch® called for multiple versions as well, but Securitron's engineers were able to devise a better, more universal way to bring UnLatch® technology to mortise locks. The result is a new patent and the MUNL.

Through a unique design approach, the Mortise UnLatch® can be set to fit any North American version of mortise lock in the market. (See photograph 2.) No matter what the configuration of the latch and deadlatch pin, the MUNL can be adjusted by using only a screwdriver and an allen wrench. Simply remove the outer cover and the shield off the strike, slide the dead latch fingers as necessary and replace the shield and outer cover. In a new construction project, this adjustability means the designer can choose any mortise-type lock on the market, and doesn't have to worry about which mortise-type electronic strike will work because the installer in the field sets the MUNL. In a retrofit project, the same MUNL model can be used throughout.

An electronic strike such as the UnLatch® or Mortise UnLatch® is the perfect problem solver for retrofit upgrades from a mechanical lock. Since the latch is electrified, the lock doesn't need to be. This eliminates the problem of routing out the door to install an electric lock, and it eliminates problems if something goes wrong. If an electric lock malfunctions, the entire lock needs to be removed from the door, occasionally necessitating removal of the door itself. With the UNL or the MUNL, the faulty strike is simply unscrewed from the doorjamb and the attached wire is disconnected. Plus, the MagnaCare® Lifetime Replacement Warranty covers all Securitron products, so if one does malfunction, it will be replaced at no cost, no questions asked, on a lifetime basis.

Another problem installers run into is the issue of cutting the doorjamb to accommodate a typical electric strike. Securitron's engineers recognized this and solved the problem by designing the Mortise UnLatch® to fit in a standard ANSI 4-7/8" strike space like the original UnLatch® without any extra routing, cutting or modifications. This not only preserves the visual appeal of the door, but also the strength of the jamb. And because the jamb is not cut, there are no issues of reduced "forcing



**2. The Mortise UnLatch® can be set to fit any North American version of mortise lock in the market.**

strength". Forcing strength is the amount of pressure required to break the keeper free from its lock position. Lock before it is electrified is maintained.

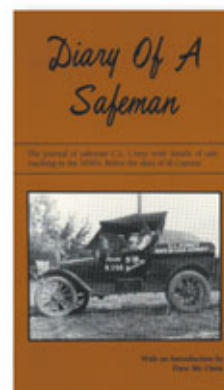
With conventional electric strikes, the cut-out doorjamb is a dead giveaway to a potential vandal that an electric strike is being used. With both the original UnLatch® and the Mortise UnLatch®, the strike is fully concealed within the doorjamb, giving the appearance of a standard strike plate. By making both the UNL and the MUNL fit in a standard cutout, Securitron is solving a problem not only of esthetics and jamb strength, but also of criminal deterrence.

With only one choice to make between 12 or 24VDC, the UNL and the MUNL are the easiest strikes on the market to specify. Plus, because of the innovative "keeper-free" design, both the original UnLatch® and the Mortise UnLatch® are fully covered by Securitron's award-winning MagnaCare® Lifetime Replacement Warranty.

To find out more about the UnLatch® family of electronic strikes by Securitron, visit <http://www.securitron.com> or call (800) 624-5625 and speak with the Sales and Tech Support team. Circle 300 on Rapid Reply. **ENL**

## Diary Of A Safeman

This book is a real gem...the private safe diary of old time safecracker C.L. Corey.



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#DIARY



# Standalone Holder/Release

by Dawn Orem,  
Product Manager  
Glynn-Johnson and Ives

There is an opportunity in installing standalone devices that hold fire doors open, but close them in case of fire. These are required by national fire and life safety codes such as NFPA 101, which require clear emergency egress paths but also call for doors to be closed for containment in the event of fire. Usually, this requirement is met by combining door closers with electromagnetic hold-opens that are tied to the building's fire alarm system. If the alarm is activated, the electromagnets release, and the door closes. However, this requires a power supply, wiring and a complex installation that may be difficult or expensive for some locations. This is especially true with existing buildings and in remodeling projects.

## Simple Installation but Complete Protection

An alternative is a battery-operated standalone device that holds the door in the open position during normal use but also contains a smoke detector that causes the door to release if the detector senses smoke. One such device requires only four screws to install, and no special door or frame preparation is required. Because the unit is independent of the building's power supply and alarm systems, the door will not release under nuisance conditions such as false alarms or power surges.

Battery operation is reliable for such devices, and power requirements are low. In the Glynn-Johnson Series 280 SensaGuard® holder/release smoke detector, for example, battery voltage is monitored every 40 seconds, and its status is signaled by a LED indicator. (See photograph 1.) When the voltage drops below 7.2V, the unit releases the door. This allows the door closer to operate and acts as a fail-safe feature. (See photograph 2.) The door also will release automatically if the battery cover is tampered with. Also, the door can be closed manually when desired, and the unit will reset when the door is returned to the open position.



**1. Battery-operated fire door holder/release mounts easily to door or frame and holds door open during normal use. Unit's smoke detector closes the door automatically when it senses a fire.**



**2. Typical corridor door installation shows how smoke detector unit fits with other hardware.**





**3. Close-up shows easily installed unit, which mounts with only four screws and requires minimal adjustment. With door closed, it requires little space and blends in with the frame.**

### Many Applications

This type of device is ideal for a variety of applications in office buildings, factories, schools, hospitals, nursing home patient rooms and multi-family residential buildings. Opportunities exist everywhere there are fire doors that must be held open.

Because it does not require systems integration, a holder/release smoke detector is well-suited for installation by locksmiths, in conjunction with related building jobs. Watch especially for remodeling or renovation projects, as well as for older buildings where traditional wired electromagnetic holders might be difficult to install. Since the self-contained battery-operated unit requires no external wiring, installation is easy. The unit surface-mounts to the top of the door frame, and its arm attaches to the door. (See photograph 3.) It can be installed on either the pull or push side of the door, depending on the application.

Operation also is simple. The door is simply opened manually, and the device holds it in that position. If smoke is detected, the door will release automatically. After the smoke clears the detector's ionization chamber, it is necessary to push the unit's reset button to re-arm the holder mechanism so it will hold the door open again. Maintenance consists of replacing the 9 V battery yearly on a regular maintenance schedule.

### Easy to Install

A brief summary of a typical installation follows:

1. Remove battery compartment cover and install 9V battery. Check to see that LED is flashing periodically; then depress the reset button.

2. Select proper mounting dimensions from manufacturer's instruction sheet, depending on degree of door hold-open desired. Depending on whether device is being mounted on push or pull side of door, hold it in place and use it as a template to mark the location of three mounting holes.

4. Drill and tap the mounting holes; then install the unit with machine screws and lock washers.

5. Check dimensions for locating arm, mark bracket hole locations and drill as directed.

6. Install the arm bracket using sex bolts, lock washers and sex nuts.

7. Open the door to the desired angle, and tighten arm set screws to hold door open.

8. Manually test door operation several times; then press the "test" button to simulate a fire condition. The door should release and close. Then press the reset button and open the door.

The hold open tension can be increased or decreased with a simple adjustment if desired.

One typical installation is on a hospital's laboratory area, where entrances to individual laboratories open into a corridor that also serves as an emergency egress path. Ventilation would be a problem if the doors to the labs were closed, and heavy traffic of staff and patients also makes it inconvenient to keep the doors shut. Here, battery-operated devices such as those described ensure the doors will close to contain smoke and fire if necessary, yet they can remain open at other times.

Look around, and you'll see similar opportunities in commercial buildings of all types, wherever fire doors are required.

---

*For more information on Glynn-Johnson products contact:*

*Glynn-Johnson*

*2720 Tobey Drive*

*Indianapolis, IN 46219*

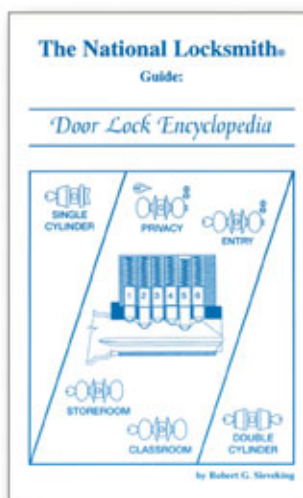
*Phone: 800-525-0336 or 317-613-8944*

*Fax: 800-525-0337*

*Circle 301 on Rapid Reply.*

**TNL**

## Door Lock Encyclopedia



The ability to remove a lock from a door, disassemble the mechanism, and remove the lock cylinder for service is not always a simple straightforward task.

**CLICK HERE TO LEARN MORE**

#DLE



2001

part 2

# Dodge



## STRATUS



by Michael Hyde

This month we conclude this two part series covering the door lock, boot lock, glove box lock and programming procedures.

### DOOR LOCK



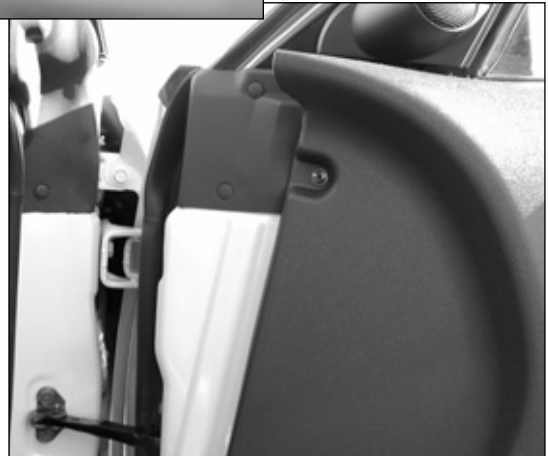
**1.** The door lock is part of the outside handle. To service the lock cylinder you must first remove the inside door panel.



**2.** On the rear edge of the panel is a screw that must be removed.



**3.** Inside the trim for the locking button is a screw fastener that has to be removed along with the one on the front of the panel.



*Continued on page 26*



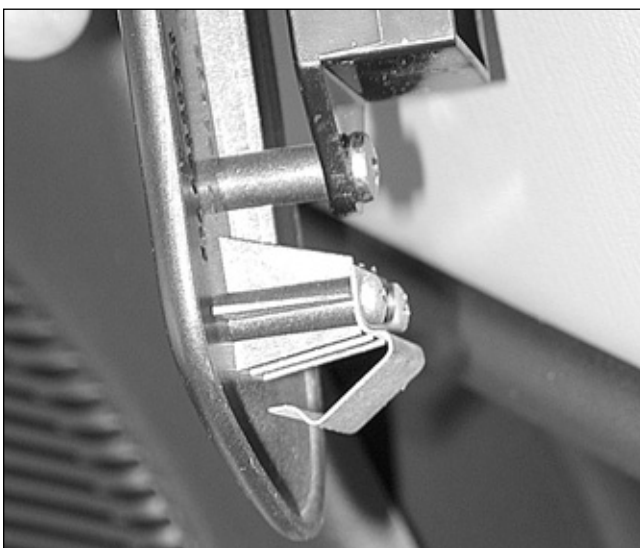
Continued from page 24



**4.** The door lock and window control panel needs to be lifted up and disconnected.



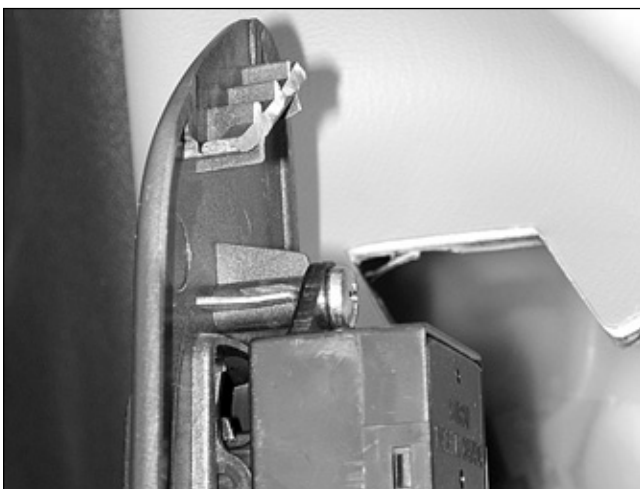
**7.** The inside handle door pull has a 10mm bolt and a screw fastener hidden behind the trim on the top and bottom sections.



**5.** Lift the control panel up from the rear section where it is held with a tension clip.



**8.** The rest of the panel is held on with the standard push-in style plastic fasteners.



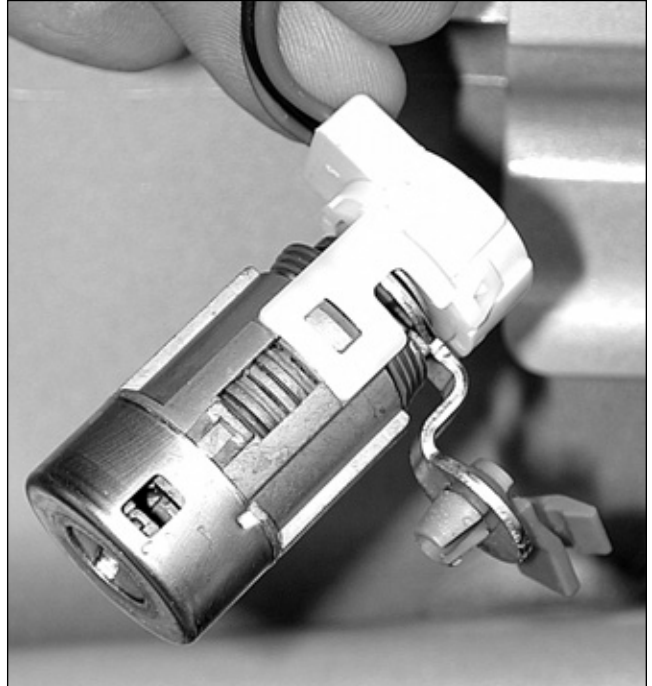
**6.** The front section of the control panel does not come out first because of a molded plastic hook. I happened to lift it up from the front and broke the plastic hook as seen in the photo. (There's \$30 I'll never see again.)



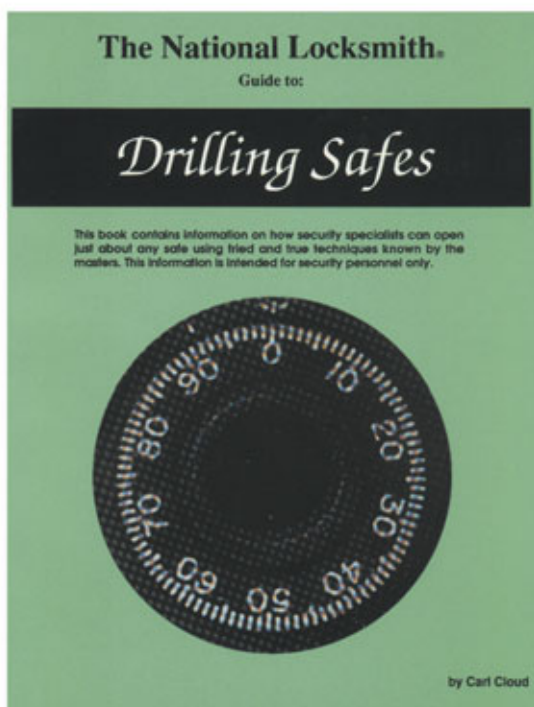
**9.** Once the panel is removed you can see the plastic liner. Take care in pulling back the liner as to not rip or stretch it.



**10.** Here's a look at the door lock cylinder looking up at it. As with most Japanese style locks it is held in with a metal ring that fits in a groove in the outside door handle.



**11.** Disconnect the linkage rod and then move the metal ring enough to slide the lock out. When you get the lock out of the handle you will have more room to get the switch off the back of the lock cylinder. Make sure you mark it so you can reassemble it correctly.



## Drilling Safes

One of the most expert safemen in the country, Carl Cloud has written a very important book on safe opening.

[CLICK HERE TO LEARN MORE](#)



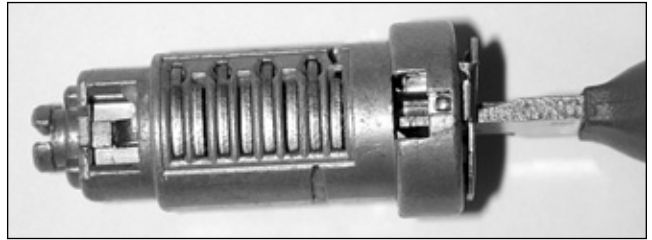




**12.** It may be helpful to unsnap part of the rubber door weather-stripping to get a better view of the door lock when trying to remove.



**13.** The door lock is disassembled pretty easy. There is a "C" clip holding the tailpiece on and the face cap is reusable.



**14.** The door lock contains all the tumblers for a complete key.



**15.** Sometimes it can be a real pain to remove some of these "reusable" face caps. I removed this one by prying up on a ledge where the cap meets the lock cylinder housing and then working the small screwdriver over to one of the dinged parts of the cap. This method will sometime tear the cap a little bit, but is easily fixed with a small hammer after you put the cap back on. Besides, the side of the cap is not seen anyway.

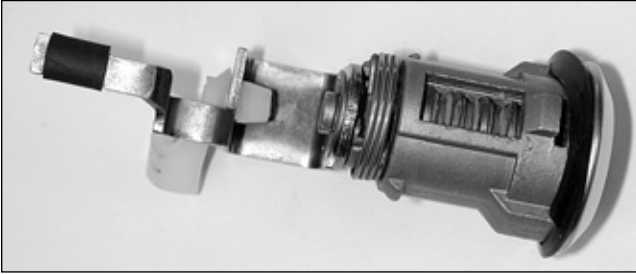
## BOOT LOCK



**16.** If you have noticed the rear section of this redesigned Stratus now looks like the rear section of an Intrepid also. The boot lock is located on the passenger (right) side of the lid.



**17.** The boot lock cylinder is held in place by a metal horseshoe style clip. This clip is very sharp too!

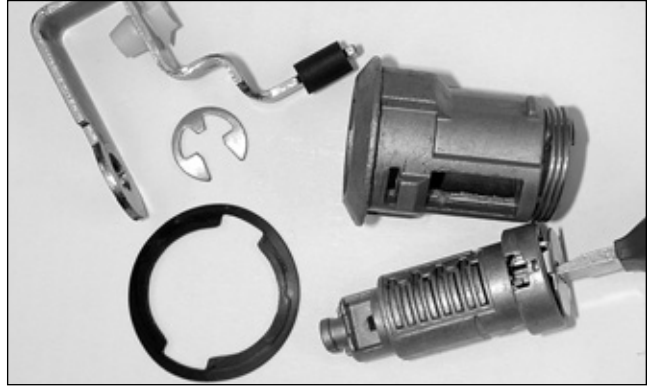


**18.** On the bottom of the lock cylinder is a large opening for the drain hole, which you can read the tumblers through.

### GLOVE BOX LOCK



**20.** The glove box lock cylinder is also the latch assembly for the glove box.



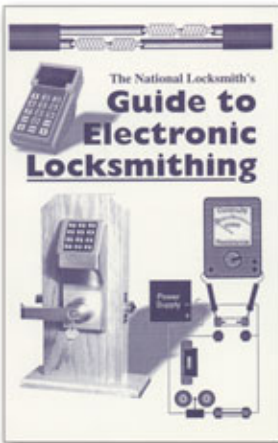
**19.** The Boot lock is disassembled pretty easy. There is a "C" clip holding the tailpiece on. The face cap is not reusable and there is currently not a specific Strattec part number for it yet. I found an ASP Toyota cap that worked great, it is part # P-30-217, a very popular cap.



**21.** Remove the two screws on the inside of the glove box that holds the lock assembly in place.

*Continued on page 32*

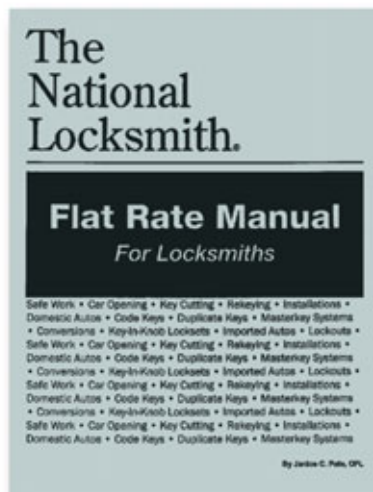
## Electronic Locksmithing



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#EL - 1

## Flat Rate Manual



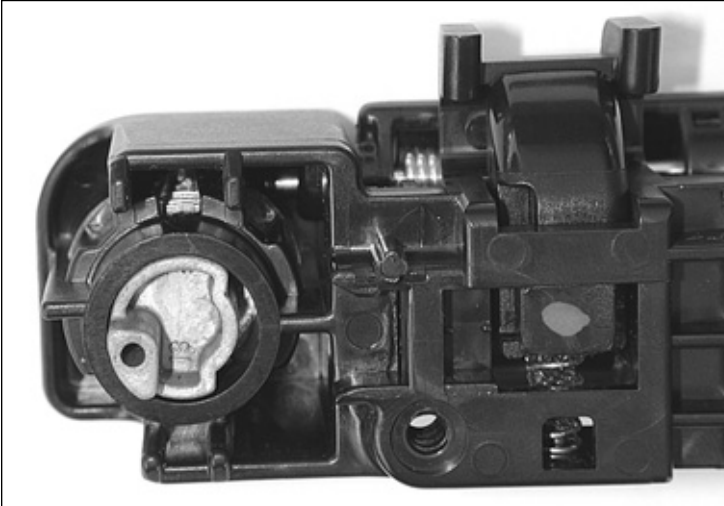
Now you can easily  
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#FRM - 1



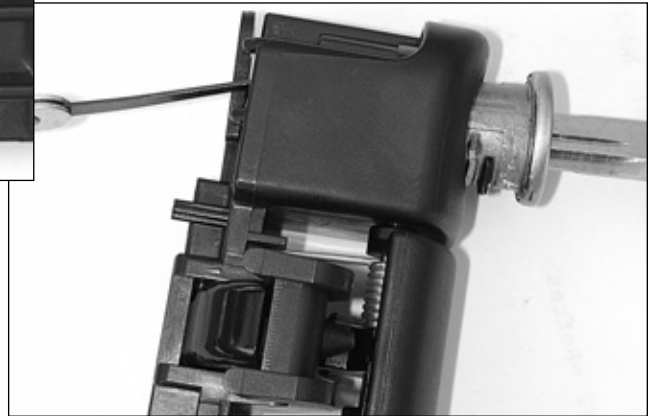
Continued from page 29



**22.** This is another one of those famous Strattec glove box locks. This one you have to rake the tumblers to pick while apply counter-clockwise turning torque at the 12-o'clock position, then depress the very front tumbler (near the keyway entrance) and rotate a quarter turn and slide out the cylinder plug. There is an opening in the top rear of the cylinder housing allowing a small access cavity to the combination tumblers and retainer tumbler.



**23.** Here is a look at the glove box cylinder plug. There are four combination tumblers and a retainer tumbler.



## PROGRAMMING PROCEDURES

### KEYS

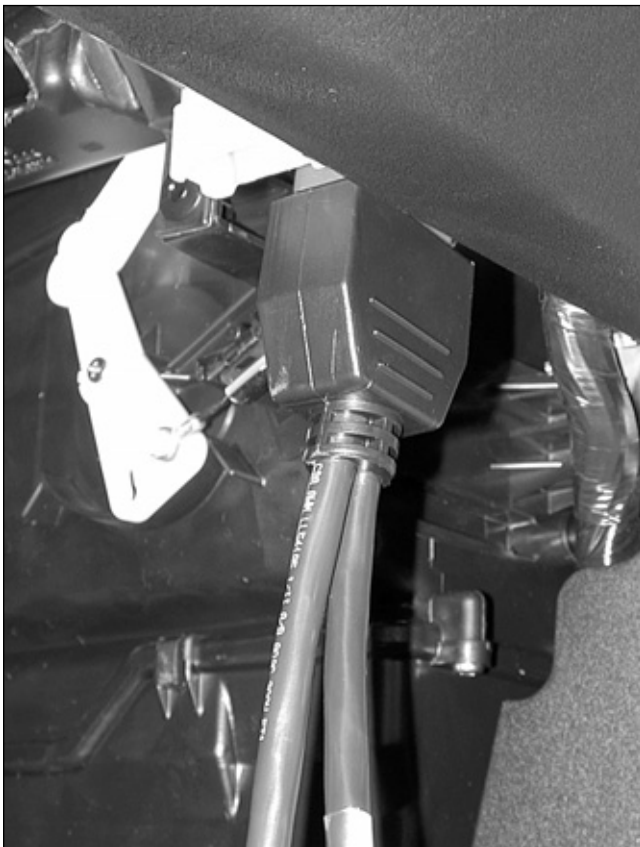


**24.** The factory key for this car is the Strattec 599450. This key has a transponder chip in it with a MIT6/X263 style keyway. A Strattec 598992 may be substituted; it has the same keyway and transponder chip, but has a Mitsubishi bow on it.



**25.** There is no on-board programming for this car without the use of a MUT2 tester. It doesn't matter how many factory original keys they have, there is no on-board programming. The MUT2 tester is available from National Auto Lock @ 800-954-5454.

The MUT2 tester is required for all Mitsubishi vehicles with a transponder system and the 2001 Dodge Stratus R/T, 2-door hardtop and the 2001 Chrysler Sebring 2-door hardtop.

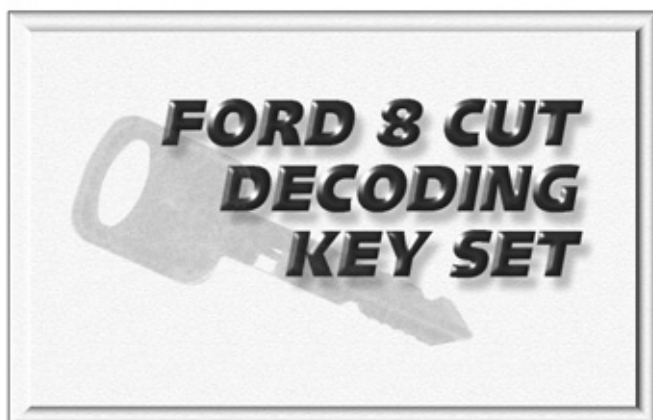


**26.** To program the new keys using the MUT2 tester, you must first connect the cable to the car's OBD2 connector port and turn on the tester.



**27.** From the Main Menu, select "System Select" and press the "Yes" button.

## Ford 8 Cut Decoding Key Set



Complete with 143 specially cut keys and simple directions. You get door and ignition keys within just a couple of minutes.

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#FD - 8





**28.** Use the up and down arrow keys to select "Immobilizer" and press the "Yes" button.



**29.** Make sure you have your key in the ignition and turned to the "Run" position.



**30.** Use the up and down arrow keys to select "Special func." and press the "Yes" button.



**31.** Select "Key ID registr" and press the "Yes" button.



**32.** Use the arrow keys to enter the pin for this car and press the "Yes" button.



**33.** If you are ready to proceed press the "Yes" button.



**34.** The key is registered and you can now add additional keys.

## MAKING FIRST KEY

Remove and decode tumblers in Boot lock to make master key. Program new keys with MUT2 tester.

**CODE SERIES:** F 0001-1571

**Spacing** (measured from tip): 1=.985 2=.902 3=.820 4=.737 5=.655 6=.572 7=.491 8=.407

**Depths:** 1=.327 2=.302 3=.276 4=.251

**Cut to Cut:** .083 1

**Key Blanks:** Ilco: X263, X264, MIT6, MIT7

**Reed Codes:** N/A

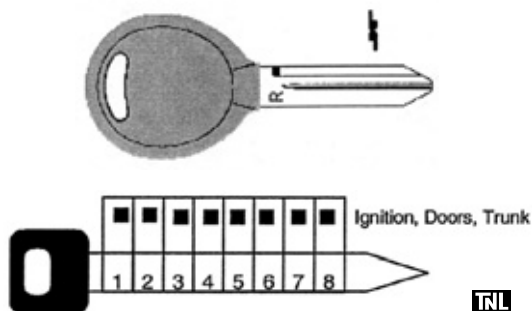
**HPC 1200 CM:** N/A

**Curtis Clipper:** Cam: DC-5; Carriage: DC-5A; ITL MFG: N/A

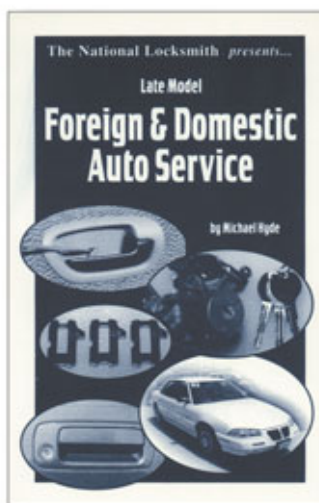
**Pak-A-Punch:** N/A

**M.A.C.S.:** 2

**NOTES:** FRAMON - Lay tip stop clip flat against left side of vise, then tip stop key against clip. Set first cut @ .407"



## Foreign & Domestic Auto Service



This book represents the best work of Automotive Locksmithing guru Michael Hyde, author of the famous AutoSmart.

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#FDAS - 1



# Quick Entry

## UPDATE

by  
Steve  
Young



TECH TRAIN PRODUCTIONS

## SAAB 9-3 & 9-5

On a chilly North Florida day late in 2000, the owner of my local Oldsmobile dealership was listening to the morning news when he heard that General Motors was discontinuing the Oldsmobile line after the 2002 model year. To say that he was caught by surprise would be an understatement. After the shock wore off, he began the search for a replacement vehicle line and decided to replace the Oldsmobile line with the Saab line.

Currently the Saab line consists of two main models, the 9-3 (see photograph 1) and the 9-5 (see photograph 2), each of which is offered in several different configurations. The 9-3 is available as a coupe, a convertible or as a sedan, and the 9-5 is available as a sedan or as a "sport wagon." All of the 9-5 models and the 9-3 sedan are four-door vehicles. The only two-door vehicles in the Saab lineup are the 9-3 Coupe, 9-3 Convertible and the 9-3 Viggen which all share the same basic body. (See photograph 3.) This is important because all Saab vehicles made from 1999 and up are equipped with seat-mounted side-impact airbags for the front seat passengers.

The trigger mechanism used by Saab for these side-impact airbag systems is unlike that used on any other vehicle sold in North America. The Saab system uses an air pressure sensor mounted inside the door to trigger the airbags. This sensor monitors the air pressure within the door cavity at all times. The sensor detects a side-impact collision by the sudden compression of the air inside the door. When the sensor is activated, it sends an electronic signal to deploy the seat-mounted airbag.

For this system to work properly, the door cavity must be nearly airtight. The moisture barrier between the inner skin



1. The 2002 Saab 9-3 sedan.



2. The 2002 Saab 9-5 sedan.



3. The 2001 Saab Viggen.



4. To unlock the rear door, wedge a gap at the base of the window near the lock button.



5. Insert the TT-1017 tool so that you can grasp the linkage rod from the inboard side of the door.



6. The inner skin of the door shields the upper portion of the linkage rod; so you will have to attack the linkage lower than on most other vehicles.

Continued on page 38



**Continued from page 36**

of the door and the door panel is much heavier than on other vehicles and it is carefully bonded to the door to form a seal that is as airtight as possible.

Probing blindly with a car-opening tool could damage the weather-stripping or the moisture barrier and could interfere with the proper deployment of the side-impact airbag. There is no airbag for the rear seat passengers and no parts of the airbag system are contained in the rear doors. That is why I recommend that you attack these vehicles through the rear door whenever possible to avoid any possible damage to the airbag system.

If someone else has damaged the weather-stripping on the front door, be sure to inform your customer and have them sign a statement that they were informed of the potential problems before you begin work on the vehicle. A damaged moisture barrier or weather-stripping will not prevent the airbag from deploying, but it may prevent the airbag from deploying as quickly as it should.

To unlock the four-door Saab 9-3 or 9-5 through the back door, you can use the TT-1017 tool to attack the vertical linkage rod that is connected to the base of the inside lock control button. Begin by wedging open a gap between the weather-stripping and the glass at the base of the window near the inside lock button. (See photograph 4). Carefully insert the TT-1017 into the door so that you can grasp the linkage rod from the inboard side of the door. (See

**Quick Reference Guide**

<b>Vehicles:</b>	<b>Tool:</b> TT-1017
1999–2002 Saab 9-3	<b>Lock System:</b> Saab 2-track 10-cut high-security lock system
1999–2002 Saab 9-5	<b>Bitting:</b> Ignition 1–10, Doors and Trunk 1, 4–10
1999–2002 Saab 9-3 Coupe	<b>Security System:</b> Transponder system standard equipment
1999–2002 Saab Viggen	<b>Code Series:</b> BC 1–BC 2865
<b>Direction of Turn:</b> Counter Clockwise on the driver's side door. (Passenger side door is not equipped with a lock cylinder.)	<b>Key Blank:</b> Ilco/Silca YM30T5



**11. The "BMW Flip Pick."**

photograph 5). Lower the tool about six to eight inches into the door and probe for the linkage rod slightly to the rear of the inside lock button.

The inner skin of the door shields the upper portion of the vertical linkage rod that is connected to the lock button. (See photograph 6). For that reason, you will be attacking the linkage rod at a lower point than on most other vehicles. In addition, because the linkage rod is angled slightly, attacking the rod from the inboard side will give you much greater leverage than if you attack it from the outboard side. As you probe for the linkage rod, watch the inside lock button for movement to help


position the tool. Once you have a grip on the linkage rod, pull upward and toward the rear on the tool in order to lift the linkage and unlock the door. (See photograph 7).

If you are dealing with a two-door Saab 9-3, such as the 9-3 Viggen shown in photograph 3, you will have no choice but to attack the front door which contains the airbag sensor. This door can also be unlocked with the TT-1017 tool, but you should use extreme caution as you use the tool to make sure that you do not damage the weather-stripping or the moisture barrier inside the door.

Begin by wedging open the base of the window near the lock button and inserting the tool so that you can grasp the linkage rod from the outboard side of the door. (See photograph 8). Lower the tool about three inches into the door and carefully probe for the vertical linkage rod. As you probe for the linkage rod, watch the inside lock button for movement to help you position the tool. Once you hook onto the linkage rod, pull the tool upward and toward the front of the car to lift the linkage and unlock the door. (See photograph 9).

You can avoid inserting a tool into the front door by using the Jiffy-Jak Vehicle Entry System. (See photograph 10). The Jiffy-Jak allows you to unlock a vehicle without inserting any tools into the door. Another alternative is to use the new high-security picking tool available from Lockmasters or from Tech-Train Productions, known as the "BMW Flip Pick." (See photograph 11.)

This tool can easily pick the high security door locks used on the Saab.

For more information on any of the tools shown in this article, go to [www.techtrainproductions.com](http://www.techtrainproductions.com) on the Internet. 



**7. Pull upward on the tool and the linkage to unlock the door.**



**9. Carefully grasp the linkage with the tool and pull upward to unlock the door.**



**8. To unlock a two-door vehicle, begin by wedging the door open near the lock button.**



**10. The Jiffy-Jak vehicle Entry System.**



# GUN LOCKS

**G**un locks have been a hot topic the last couple of years. More news attention than ever before has been focused on gun safety and accidental deaths due to unprotected guns in the home. As a result, gun manufacturers are now required to supply a gun lock with each product they produce. Every gun owner should have some form of gun security and now some states are mandating it.

## PRO-LOK®

In the past, the primary purpose of a gun lock was to prevent very small children from gaining access to a firearm and accidentally causing a discharge, either causing serious injury or death. A lot has changed over the past year with gun locks. After recognizing that many gun locks on the market were not providing the level of protection that many people thought they should, the California department of justice was forced to develop standards for "firearm safety devices" through legislation. Additionally, in 2001 the United States Consumer Product Safety Commission performed their



own evaluation of gun locks after recalls of over 1 million gun locks. Although the CPSC testing was not scientific, 32 gun locks were tested; one trigger lock and one cable lock passed the informal testing while the balance of them failed to meet the CPSC's expectations. PRO-LOK made the only trigger lock to pass the CPSC testing. As a result of the poor testing results, the CPSC

initiated the development of National standards.

In addition to making the only trigger lock to pass the CPSC testing, PRO-LOK was the first gun lock manufacturer to pass the new rigid California standards. PRO-LOK has expanded its line of California approved gun lock products. PRO-LOK makes 6 out of the 7 approved California trigger locks and now offers California approved cable locks, gun boxes (small safes) and lever action attachments.

In January 2002, new California legislation took effect that required California approved gun locks to be sold with every firearm, new or used, sold or transferred in California. PRO-LOK was the only gun lock manufacturer shipping locks when this law took effect and was shipping out thousands of locks daily to meet the demand of most gun and sporting good stores, chain stores such as Wal-Mart and even providing locks on an OEM basis to many large firearm manufacturer's. Current California legislation that has passed the State Senate and is expected to pass the General Assembly will require that no gun lock will be able to be sold in California unless it is approved by the Department of Justice after January 01, 2003.

If this legislation is passed and signed as expected by the Governor, locksmiths will be affected. Locksmith stores and locksmith distributors will also be forced to only sell approved California gun locks. National standards will not be far behind. Will you be prepared? If you have any questions about proposed legislation, feel free to contact PRO-LOK at: 655 N. Hariton St., Orange, CA 92868. Phone: (714) 633-0681; Fax: (714) 633-0470; E-mail: mail@pro-lok.com; Web: www.pro-lok.com. Circle 302 on Rapid Reply.

## MASTER LOCK

To meet the needs of consumers and California firearms dealers for

approved firearm safety devices, Master Lock has developed its No. 107 Armored Cable Gun Lock. This California DOJ approved gun lock has several features that increase gun lock safety such as: a 14-inch long armored cable, with an outer diameter small enough to fit through the action or chamber of a .22 caliber firearm, a hardened lock body that can withstand cutting and sawing attacks and make it virtually impossible to break through, and A Deadbolt Locking Mechanism For Added Strength.

The No. 107 Armored Cable gun lock has been tested by an independent laboratory to meet the stringent California AB106 standard and is approved by the California Department of Justice.



A firearm must be unloaded before the cable gunlock can be installed. This helps prevent accidental discharge because the action is kept open and a round cannot be chambered.

Master Lock's cable gun locks fit revolvers, pistols, rifles and shotguns, including 22 caliber firearms.

The No. 107 is individually packaged with instructions for use on all types of firearms.

*For more information on Master Lock's No. 107 Armored Cable Gun Lock, write to Master Lock at P.O. Box 100367, Milwaukee, WI 53210. Phone: (414) 444-2800; Fax: (414) 449-3162 or visit [www.masterlock.com](http://www.masterlock.com). Circle 303 on Rapid Reply. **TRL***





by Charles Stephenson, CPS, CJS

**W**e seem to most often hear about one company buying another in our industry, or some sort of merger taking place, but seldom about a new startup company. October 2001 saw the birth of a new safe company in Lebanon, Indiana. While the company may be new, the officers have been around the industry for a combined 50 plus years. Jeff McQueen is President, Penny Golden is V.P. of Sales and Janet Pape is V.P. of Marketing and Operations. (See *photograph 1.*) You will remember these folks from their years with Schwab Safe and their many appearances at trade shows across the United States.

While Phoenix Safe is new in the United States, the name is well established in the U.K. as Phoenix Safe and traces its history back to 1799 in Liverpool. The U.S. company is an independent partner of the U.K. namesake and has borrowed on their experience to avoid the "new company pit falls," such as locating other safe manufacturers that offer quality products to supplement the line. Phoenix Safe manufactures and distributes a full line of safes that provide fire resistance, security or both.

The company's name in the early days was Richmond Manufacturing. At the time they were maritime carpenters producing seaman

chests, strongboxes and coffins for the merchant fleets sailing from Liverpool to America.

During the early 1800's steel-banded wooden strongboxes gave way to solid steel construction. In 1824, Richmond was purchased by a Spanish Basque company and renamed Withy Grove Safe Co. At this time, in competition with such famous safe and lock masters such as Chubb, Yale and Tann, they began to design, patent and manufacture special security safes with complex locking mechanisms.

The company continued to evolve over the years, and in 1984, Phoenix Safe Co. was formed to provide a

single-source for locksmiths and safe dealers looking to purchase security products for resale.

Today, Phoenix Safe International offers personal and commercial safes and files for protection from fire and burglary. (See *photograph 2.*) Cylinder locks, lever locks, mechanical combination locks and electronic safe locks are utilized on various



**1.** V.P. of Sales Penny Golden, President Jeff McQueen, and V.P. of Marketing and Operations Janet Pape, surrounded by thousands of safes in the warehouse.



**2.** Typical retail display; Model 1231 (center) is proving to be the most popular model.





**3.** Phoenix Centurion 1220 features dual control locks and Swedish SP testing and approval.



**4.** Data Care 2002 offering Class 125 2-hour fire rating.



**5.** Hotel safes with digital electronic locks.



**6.** A fire resistant 2-drawer lateral file UL Class 350.



**7.** Phoenix Continental 1154SP with an S&G top reading dial.

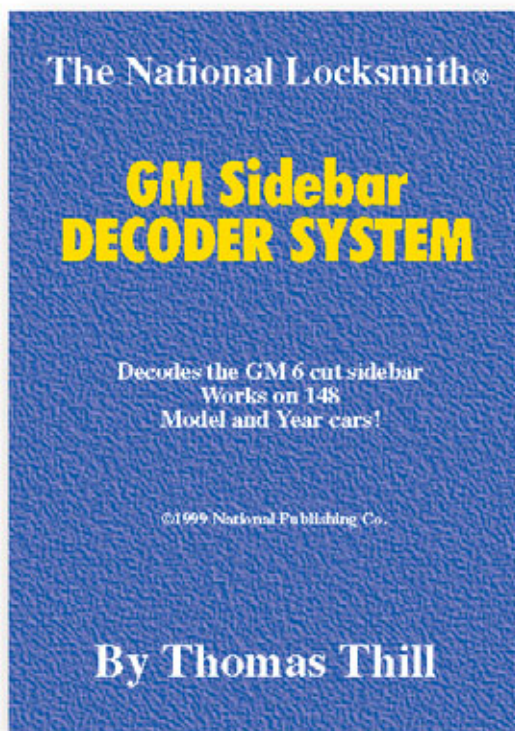
containers. (See photograph 3.) Data safes (see photograph 4,) burglary safes, deposit (rotary/drop) safes, fire resistant safes with lifetime warranty, wall safes, floor safes, hotel safes (see photograph 5,) and insulated files for the office or home (see photograph 6,) are in inventory in the Indiana warehouse. Locks from manufacturers such as Stuv, Sargent & Greenleaf, the Global Lock and Diplomat are featured throughout the lineup.

Independent testing laboratories such as Underwriters Laboratories, Swedish National Testing Research Institute (SP), Industrial

Advancement Administration and German VDMA 24992 Standard are some of the labels the containers carry.

The Phoenix Continental 1154SP is one model that will surely prove popular as a home safe. (See photograph 7.) It carries both a UL Class 530 1-hour fire label and a UL Residential Security Container burglary label. (See photograph 8.) The outside reveals a Sargent & Greenleaf top reading dial and ring aside beefy hinges and handle. Just the outer appearance should be enough to discourage any would be burglar. Inside the door sports four

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#TT - 1



moving and two fixed locking bolts. The Sargent & Greenleaf 6730 is protected by a 3/8" Hardox steel plate as is the handle cam. (See photograph 9.) The door thickness totals 4" fronted by a 1/2" steel plate. Along side the 6730 is a plunger type external relocker. The bolt works offers a detent for automatic relocking upon closing the door.

This fast growing company has added two new series of safes to their lineup since my May visit. The Castille 6 Series offers 3 models in Euro Grade 0 which is recommended for up to \$8,500 in cash or \$85,000 in

jewelry. (See photograph 10.) The Condor 20 Series offers 5 models in Euro Grade 2 (slightly above a TL30) for up to \$25,000 in cash or \$250,000 in jewelry. These two new series complete the product line, but I will bet, not for long.

While interviewing the officers for this article a few things stood out as their proudest comments. While thousands of safes are in their warehouse, they offer shipping of orders within 48 hours, single units as a minimum order and freight is included in the price within the 48 contiguous states.

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8. The 1154SP carries both the UL Class 350 1-hour fire label and the UL Residential Security Container burglary label.



9. Inside the Phoenix Continental model 1154SP.



10. Castille 6 Series.

The Phoenix Safe International offices and show room are located at exit 140 of I-65 just north of Indianapolis and the warehouse is nearby, as they say.

For further information contact Phoenix Safe at 1-800-636-0778, FAX 765-483-0962 or email [pgolden@phoenixsafeusa.com](mailto:pgolden@phoenixsafeusa.com). Circle 304 on Rapid Reply. **TNL**



# Beginner's Corner



## Servicing the American 2000 Padlock

By Jim Langston

This Hockey puck shaped padlock from American Lock Co., is commonly used on vending machine locks. (See *photograph 1.*) The design is rather unique because there is not an exposed shackle. If you ever need to service or rekey the cylinder, at first glance you may be a bit perplexed as to how the cylinder is removed. It is, however, rather easy once you know the trick.

Removing the cylinder requires just one tool, an Allen wrench. On the back of the lock at about the 7:00 position there is an Allen screw. On the earlier versions of this product the Allen screw was covered with a lead type of material to hide the screw. If it is, just remove the material with an ice pick to access the screw.

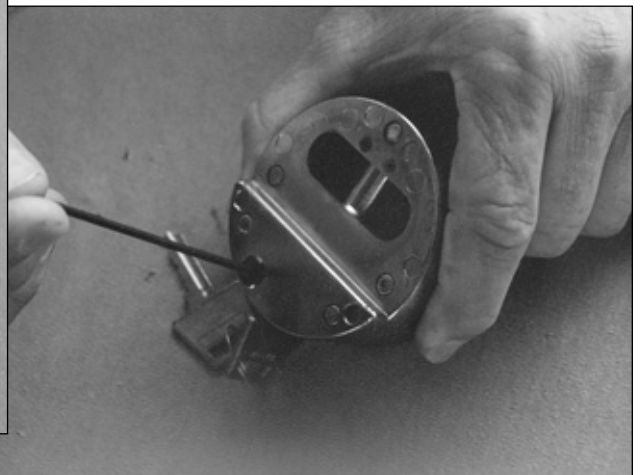
On the newer version of the 2000 the Allen screw is exposed. There

was really no need to cover the screw because with the lock in place you can't access the screw to remove the cylinder.

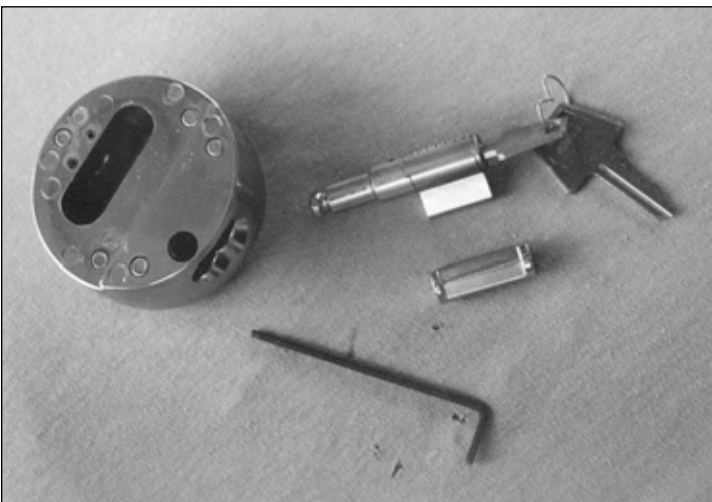
Insert the Allen wrench and turn counter-clockwise about three or four turns. (See *photograph 2.*) This is the setscrew that holds the cylinder in the body of the lock. Once it is unscrewed, insert the key into the cylinder, turn the key to the right to unlock it and pull the



1. The American 2000 Padlock.



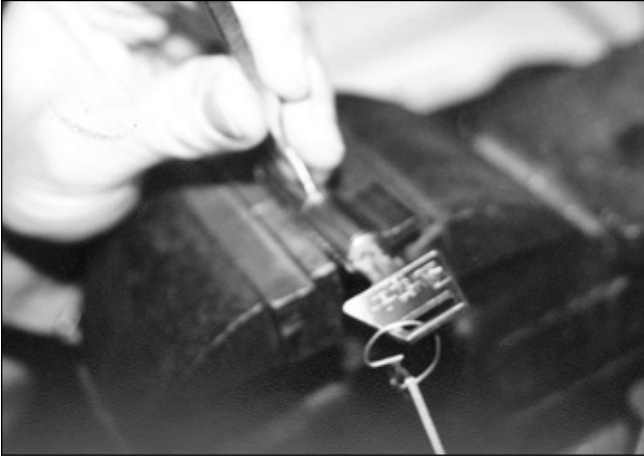
2. Insert the Allen wrench and turn counter-clockwise.



3. The cylinder housing will come out.



4. There is roll pin that secures the retainer to the cylinder.



**5. Drive the roll-pin out.**

cylinder straight out. The cylinder housing will come out of the lock body as seen in *photograph 3*. As you can see there is a retainer (locking bolt) attached to the back of the plug and a stabilizing cap that fits over the bible of the cylinder.

To remove the retainer from the cylinder, there is roll pin that secures the retainer to the cylinder at the location shown. (See *photograph 4*.) Take a small hammer and punch to drive the roll-pin out. (See *photograph 5*.) With the roll pin and retainer removed the cylinder can now be serviced. (See *photograph 6*.)



**6. The cylinder can now be serviced.**

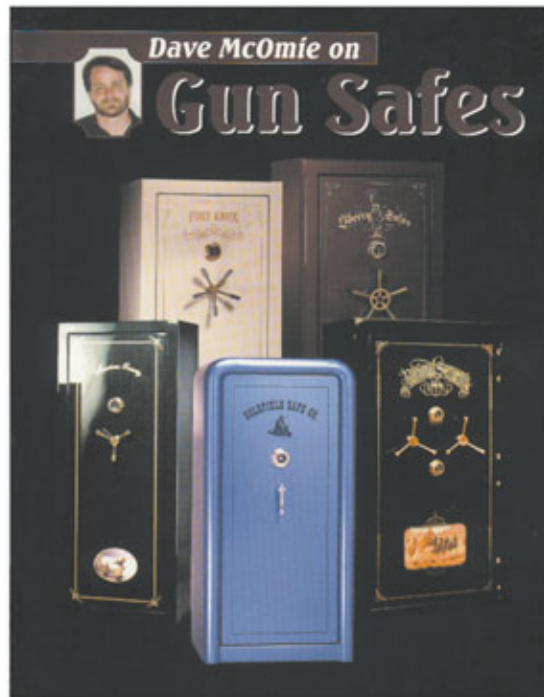
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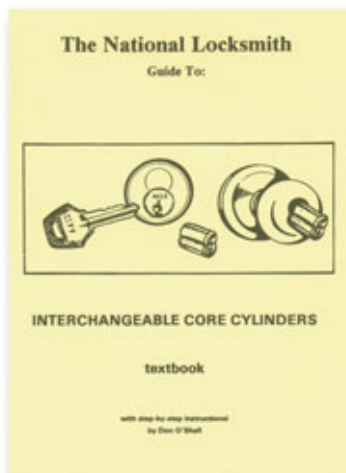
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#GS - 1



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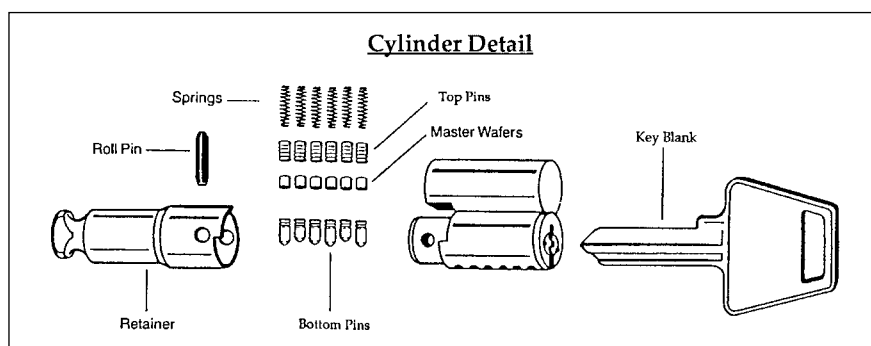
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#ICB - 1



**7. Insert the key and push the plug out.**



**A. Exploded cylinder view.**

Rekeying this cylinder can be accomplished in one of two ways.

Using the proper plug follower for small diameter plugs, insert the key and push the plug out. (*See photograph 7.*) With the plug removed it can then be repined.

Another way to rekey this cylinder is to insert the existing working key. Rotate the key 180-degrees, which will align the pins with the bottom of the cylinder. At the bottom of the cylinder you will notice corresponding holes, which allow the pins to drop out. Insert the new key and corresponding pins, then rotate the plug back 180-degrees and you are done. See exploded view *illustration A* of cylinder.

The American 2000 Padlocks can be impressed, however,

it can also be very difficult because the lock uses serrated pins. This means they have rings cut into the pins that give false impression marks. If a customer loses a key you may have to drill the cylinder out if you can't impression or pick. Keep in mind, however, that with the lock installed it can be very difficult to properly drill the cylinder.

For more information on American Padlocks contact:

American Lock Co.  
3400 W. Exchange Rd.  
Crete, IL 60417  
Phone: 800-323-4568 or 708-534-2000  
Fax: 708-534-0531  
Web: [www.americanlock.com](http://www.americanlock.com)

**Point to Ponder:** *The bitterness of poor security remains long after the pleasures of low prices are forgotten.* **TNL**

# The Lighter Side

## Repeat Offenders



by Sara Probaro

**“H**ave you ever noticed how many customers we have who repeatedly lock themselves out of their cars?” Don asked me one day.

“I guess I haven’t paid that much attention. Oh, there are a few repeaters I recognize, but I never kept count.” I began to think about it, and soon I was chuckling. “How many times do you suppose we’ve opened Mrs. Brownlee’s vehicle? Ten? Twelve?”

“More than that,” Don said. “She was locking up her keys nearly every week, there for a while. It got so bad, she made me promise not to mention it to her husband. Then she’d get the money from him on some other pretense and come by to pay us the next day. She was almost as bad as that little college girl who kept leaving her Timex watch as collateral every weekend when we opened her car, and would come by and redeem it every Monday.”

“Was it Mrs. Browlee whose husband called us one morning to open his car, and before you could leave the shop, she called for you to open hers?”

“No, no. You’re thinking about that nurse, over at the hospital. I can’t think of her name, right now, but she was another regular. She got her hair done every Wednesday morning across the street from the post office, and nearly every week, she’d lock up her keys. The day you’re talking about, she was at the beauty shop, and her husband was parked directly across the street, at the post office. When she called, I told her I’d get to her as soon as I took care of her husband, and that’s when she said if I mentioned to her husband that she was locked out too, she’d throttle me.”

“So, what happened?”

“She stayed inside the beauty shop until I got him on his way, and then I opened her car for her. She was a tough cookie, somebody I’d hate to tangle with.”

“Did her husband ever find out?”

“Not from me.”

Someone came into the store then, and since the guys were already busy with customers, I walked up front to see if I could help. A minute later, I returned with a couple of large boxes in my hands.

“Pizza!” I said to Don. “Little Nero’s sent it over for everybody’s lunch.”

“How come?”

“Don’t you remember, the manager was short on cash the other day when he locked his keys in his car for the third time that week, so Neil told him we’d take it out in trade, just this once.”

I glanced at the clock, wondering if Keith would be back from his service call up in the hill country in time to eat pizza while it was still hot. He’d been gone about forty-five minutes, and it was about a thirty-minute drive each way, so even if the car opening went without a hitch, he’d be a few minutes away. I was about to put his share into the microwave for safe keeping, when I saw him wheel into the parking lot, out front.

He was grinning when he came in, and his feet were almost dancing.

“Here I am, to save the day!” he sang the Mighty Mouse theme.

“What have you been up to, now?” I asked, chiding him a bit.

“I’ve been performing a little magic,” he said. “When I got up there to the guy’s truck, I noticed right off the passenger door wasn’t locked. Well, I figured, he was going to have to pay me the trip

charge and mileage anyhow, why not make it worth his while, right? I played around with the driver’s door a minute, tugging on the handle, groaning and complaining about how hard it was going to be getting into that particular model, and so on.”

“Then I went to my van and pulled out my big tape measure, and started measuring the passenger door—first this way, then that way. After making a few calculations, I stood up real close to the door, where he couldn’t see much around me, and I got my thumb on the door handle, in front of me. Then I made a big production of stroking the door with my other hand, made a big circular motion on the surface of it, and then all of a sudden, I hit the door hard in the center of the circle, with the palm of my hand, while I opened the latch with the other. When I jumped back, the door swung open, ‘Ta Da!’”

Keith was laughing so hard, he had to stop talking for a minute.

“You should have seen the look on that guy’s face. He said, ‘How’d you do that?’ and I told him, ‘You were watching me. Didn’t you see what I did?’ and he said, ‘Yes, but I don’t believe what I saw.’ It was great. I wish you’d have been there.”

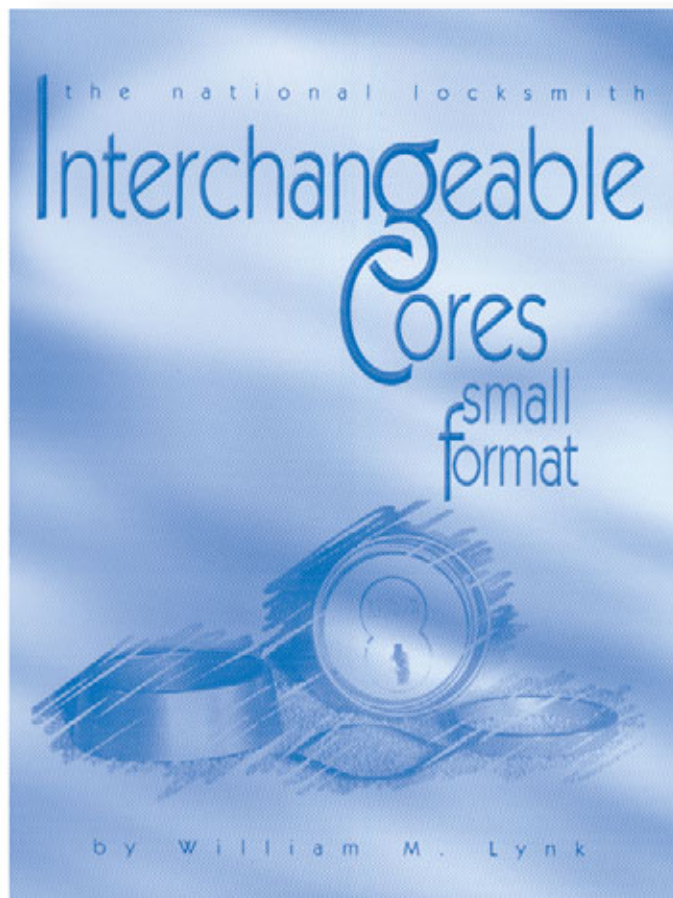
A week or two later, we got another call from the same man, late one afternoon. He was locked out again and needed somebody to come get his car open. This time Don went.

When Don arrived at the site, the man was leaning up against his truck, waiting. The passenger door was badly dented in, and the man was not happy.

It took Don a bit longer to open it than it had taken Keith to pretend, and when he finally



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returned to the store, Keith was gone for the day. But a few minutes later, he and his wife drove up and Keith came into the store to rib Don a bit.

"You sure were gone a long time. What's the matter," Keith started, "you need me to teach you some magic? Maybe I should have been the one to go, again."

"No, it's probably a good thing you didn't. Your customer wasn't very happy with you or me, today."

"How come?"

"He'd been trying to do the little trick you taught him for more than an hour, before he called us, and he managed to put a pretty sizeable dent in the passenger door, trying to find just the right spot to hit so the door would swing open. Then he'd gotten mad and kicked it a few times. He kept trying to get me to show him the trick, to the point that I finally told him I never had been able to master that technique. So it took me a little longer than it did you."

About that time, Keith's wife came in.

"Are you two going to talk all evening?" she asked. "Don't forget, we have to pick up Wyatt after his soccer practice, and it's about time."

"Okay," Keith replied. "I'll see y'all in the morning," he said to us, as they started for the door. Then he said to his wife, "Gimme the keys."

"I didn't bring my keys," she said.

"No, my keys. I left them in the ignition."

He looked at her, and she looked at him.

"Tell me you didn't lock the car," he said. Then, "Oh, no!" they said together.

"Good thing we're here," Keith said, turning to Don. "Can I borrow your opening tools a minute?"

"Opening tools?" Don queried. "Sure." He rummaged through the cabinet until he found what he was looking for. "Here you go. Mind if I watch? Maybe you can teach this old dog a new trick or two." And with a mischievous little smile, he handed Keith his tape measure.



# SENTRY "D" Safes



by Dale W. Libby, CMS

Grade "D" safes, what does that mean? Well, there is a fire classification of "D" which means a 1/2-hour rating against fire. Most small fire safes are rated class "C" which is a full hour rating. Class "D" has pretty much disappeared as a fire rating. Class "B" and "C" are burglary rated safes with 1/2" steel and 1" steel walls and doors. Simply stated, a "D" safe is a disposable safe.

Why am I writing about these "D" safes, and not Allied Gary TL30 units, Tann, Chubb, and SLS units? The answer is simple. These "D" safes are everywhere. The Sentry safe I am writing about this month is omnipresent. In a one-month time frame I have seen this unit advertised in two magazines, on the shelves at Wal-Mart, Sam's Club, Ace Hardware, Home Depot, and Menards, just to name a few locations here in the Mid-West. The most depressing news is yet to come.

When I priced this unit through a supplier of this safe to the locksmith industry, the price was about \$70.00 wholesale. This did not include the shipping charges. When I priced this unit everywhere else, it was \$79.00 retail. I could not afford to buy this safe wholesale and sell it when anyone can buy it retail for less than I can buy it wholesale.

The safe in question for this article is shown in *photograph 1*. It has a key lock that throws the bolts and a spy proof combination dial. The safe has the Sentry logo in the lower right hand front corner. On the right side of the safe is the tag with the serial number and the information that this

safe was "Made in China." It is a nicely painted box, the inside bottom is lined with material and there is a shelf. This unit makes a great handgun safe that

change index eight numbers to the left of the opening index. On most safes this indicates a key changing lock mechanism. Not so here. The lock is a 3-wheel hand-change lock. More on that in a moment.

For the key lock the key is reminiscent of a "Zeis-Ikon" key. There are four cut sides and the key can only be inserted in one position. There is a colored dot on one side of the key that corresponds with the dot on the face of the cylinder. The dot is on the top of the key to correctly insert it. The key is numbered and stamped, and a new key could probably be ordered directly from Sentry.

The key is used to force the bolt bar into the wheel pack when the combination is dialed correctly. The key operates a large cylinder with a stud tailpiece attached. The large stud fits through a hole in the bolt bar on an eccentric cam. If I did not have a key for this unit and had to open it, I would drill out the lock cylinder and then drill a wheel pack observation hole at 9:00 o'clock and force the bolt bar into the wheel pack. On this safe, I did have the key, but no combination.

Now, on to the wheel pack itself. I have seen this same wheel pack used in a couple of different safes that Sentry imports. The Sentry gun safe, which is not a bad product at all, uses this same wheel pack. The gun safe has the same exact dial, and the opening handle is located about a foot directly beneath the dial. On the gun safe, the locking bolt comes up and enters the wheel pack from the bottom at the 6 o'clock position between the dial and handle.



1. Sentry Grade D fire box.



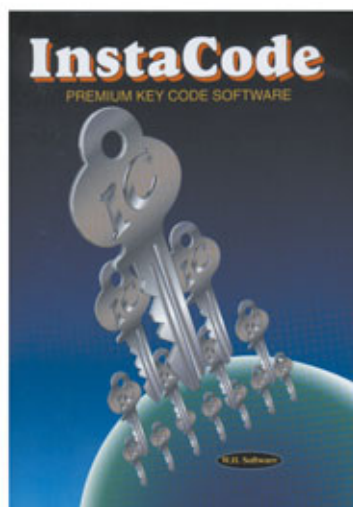
2. Spy Proof dial with changing index mark eight numbers to the left of the opening index.

can be placed on a shelf with the enclosed rubber feet, or with the feet removed, it can be bolted to a shelf for a little more security. The small hole in the door at 10:00 o'clock is mine.

The dial is a top reading spy-proof dial. (See *photograph 2.*) There is also a



## InstaCode

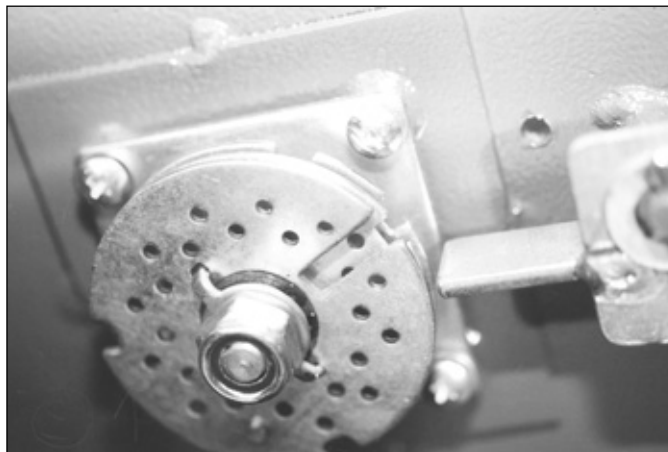


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#IC - 2003



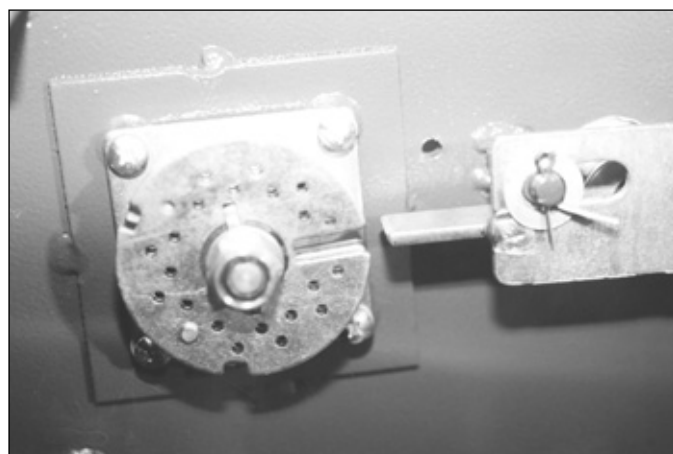
**3. Three wheel drive pack, all wheels have two false gates to confuse a manipulation attempt.**

On this safe, the bolt bar enters the wheel pack at 9 o'clock, directly between the key lock and the dial. The wheel pack can be seen in *photograph 3*. It is mounted to a plate with four screws at the corners. The plate is then welded to the door.

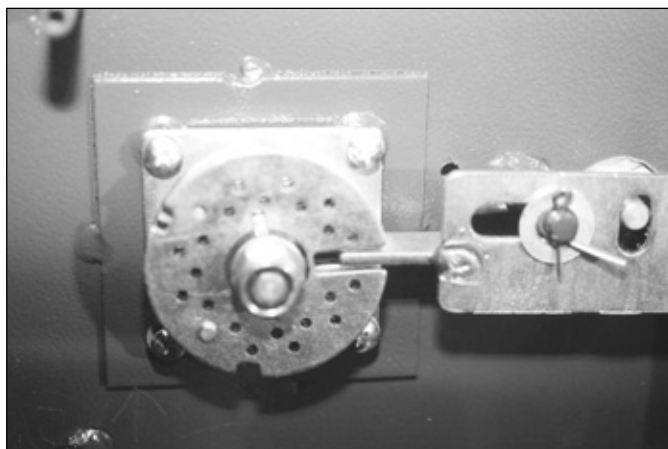
Another innovation with this perforated wheel lock is that all the three wheels have false gates for master manipulators to contend with. Since time is money, drilling is more economically feasible and profitable than manipulating the safe open.

In *photograph 4*, the wheel gates are lined up at the 9 o'clock position ready

the cam of the key lock. I have never tried to punch one of these safes, but I will give it a try if I do not have a key.



**4. True (not False) gates aligned. Turning key forces bolt bar into wheel pack.**



**5. Safe open, bolts thrown enough to open door.**

for the key to be turned. If you do not have a key, just lining up the wheels is a no win proposition. You cannot force the bolt bar into the wheel pack without the key.

I drilled in at 10 o'clock about 3" out from dial center to scope the wheels. If

you drilled about 4" out at 9 o'clock, you would hit the edge of the bar. By punching, you could possibly shear the cotter pin and force the bar and washer over the guide post end. Once the bar has sheared the cotter pin, it would be free moving and even without the combination or key present, this grade "D" box would open.

The bar would be pushed back enough to bypass the wheel


pack, and the bar would go back far enough to disengage from the stud on

the cam of the key lock. I have never tried to punch one of these safes, but I will give it a try if I do not have a key.

*Photograph 5*, is the picture of the safe unit opened and the bolt bar moved as far as it will go into the wheel pack. Also seen is the back of the key lock with the stud in the bolt bar shown. The only thing holding the bolt bar in place is the cotter key and washer on the mounting post. Remove this washer and pin, and the little box is open, without key or combination.

The next time a customer calls and says his or her safe will not open, be prepared for anything. The unit in question could be an old Mosler, a filing cabinet, or even this diabolical Sentry. Open Grade "D" Safes & Prosper. **TNL**

# Kwikset's UltraMax Deadbolt



by  
**Sal Dulcamaro,**  
**CML**

Kwikset has recently introduced a Grade 1 deadbolt lock. It is part of Kwikset's UltraMax Security line of locks, and the single cylinder version of the deadbolt has been designated Kwikset model number 980. As is typical with double cylinder deadbolts in the same product line for Kwikset, the model number 985 identifies that one. Models 980 and 985 become Kwikset's first grade 1 deadbolts to be introduced. Some years back the old models 880 (and 885) were quite heavy duty, but apparently didn't meet Grade 1 standards. There are some interesting features in the new Grade 1 deadbolt.



**1. The Kwikset UltraMax model 980.**

Photograph 1, shows the outside look of the keyway. It may be a bit hard to see minute details of the keyway, but it shares the slightly inset keyway broaching that is also found on Titan locks. That shallow additional broaching on the top part of the keyway allows the top shoulder of the key to insert past the face of the plug. A close-up view of the new style Kwikset keys shows they are essentially the same type as the Titan keys (as far as the key blade) except that the bow design is the same as standard Kwikset. (See photograph 2.) Take note of the very steep vertical surface of the first cut next to the key's top shoulder. That is the same as with Titan.

Much of the overall design of the lock resembles its predecessors in many of the other Kwikset deadbolt lines. That is not too unusual, since most lock lines go from light duty to



**2. The UltraMax Keys.**

medium duty to heavy duty through differences in materials, size and strength for individual components. As I go into the components of the lock, let me note that the lock is not extremely heavy, at least by a measure of weight on a scale. I'm used to Grade 1 deadbolts that seem to weigh as much as a boat anchor. That is not the case for the model 980, although it is probably a lot heavier than most of Kwikset's other deadbolt locks.

Photograph 3, shows the backside of the model 980 outside lock assembly. It has the same standard tailpiece found on other Kwikset deadbolts, but the retaining clip



**3. The backside of the model 980.**

*Continued on page 56*



**Continued from page 54**

for the tailpiece is concealed from view. There is a removable adapter ring, which when removed reveals access to the retaining clip. (See *photograph 4.*) With the ring, the lock is set up for installation in a 2-<sup>1</sup>/<sub>8</sub> inch diameter crossbore hole. When the ring is removed, the model 980 is set up for a 1-<sup>1</sup>/<sub>2</sub> inch diameter crossbore hole (or any hole size greater than 1-<sup>1</sup>/<sub>2</sub> inches, but less than 2-<sup>1</sup>/<sub>8</sub> inches).



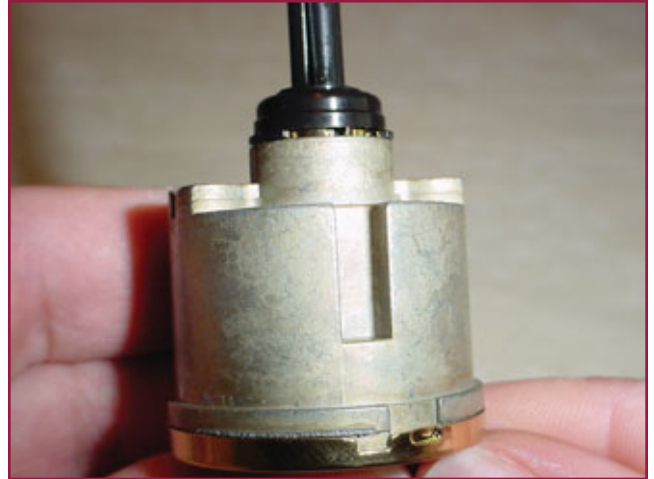
**4. A removable adapter ring.**

With the adapter plate off, you can see the likely reason for the lock not being extremely heavy. There are a series of hollow sections in the cast housing. That missing material that reduces the weight should not create the impression that the housing is weak and could easily be crushed. After all, it met Grade 1 standards with that physical design. If the hollow sections made it weak, it could not have been certified as Grade 1.



**5. The lock cylinder is separated from the guard ring/housing.**

The lock cylinder has been separated from the guard ring/housing in *photograph 5*. There is a label on the brass cover plate (covering the reinforcing guard ring/housing), which indicates a lifetime finish guarantee. Although the key is much like the Titan key, the UltraMax deadbolt does not use a key removable cylinder like Titan. If you wish to service or rekey the lock, screws must be undone to remove the lock cylinder. There is a cap of sorts that covers the back of the lock cylinder plug and also conceals the tailpiece retaining clip. A close-up view gives a slight glimpse of the retainer



**6. A cap covers the back of the lock cylinder plug.**

in the tiny gap between the cap and the back of the lock cylinder shell. (See *photograph 6.*)

The retainer has been lifted up slightly out of its slot in the back of the plug in *photograph 7*. It is no longer completely concealed by the cap. After removing the clip



**7. The retainer has been lifted up slightly.**

and tailpiece, the lock cylinder doesn't look much different than that from any other Kwikset deadbolt. (See *photograph 8.*)

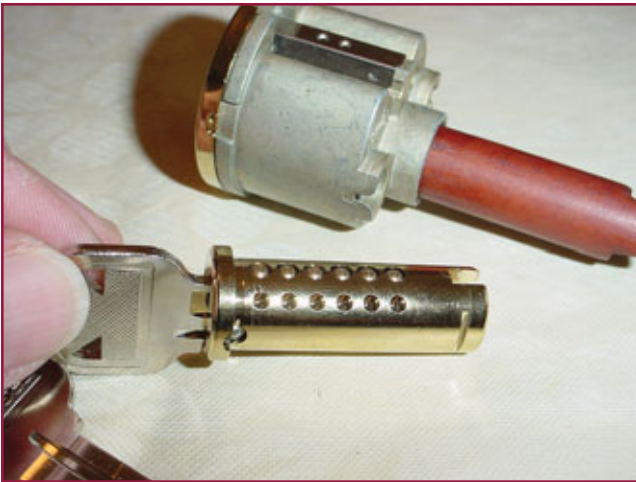


**8. The lock cylinder doesn't look much different from any other Kwikset deadbolt.**

*Continued on page 58*



Continued from page 56



**9. The plug has been removed.**

The plug has been removed in *photograph 9*. It has six pin chambers like the Titan locks. You can see the corresponding six narrow and shallow chambers used for trapping the tiny ball bearings when construction keying is done. For the most part, it looks like an ordinary Kwikset lock cylinder plug. Everything seems fairly ordinary until you look on the right side of the plug at the face end. A closer view can be seen in *photograph 10*. There is an imbedded ball bearing there and a matching one on the opposite (left) side of the plug. They are there to resist drilling.



**10. Look on the right side of the plug for a ball bearing.**

Depending on the drilling technique used, the two imbedded ball bearings may act as a deterrent to drilling into the lock cylinder plug quickly and easily. I know of some maintenance people (and some locksmiths, too) who take a  $\frac{1}{2}$ " drill bit and just drill out the entire plug as a means of entry. If that technique is used, the ball bearings will be a deterrent. I typically use a  $\frac{1}{8}$ " drill bit to drill at the shear line when I choose drilling as a means of entry. There is nothing shielding the shear line, so that technique should still work.

I have described some physical characteristics (and will describe more) that will tend to paint the model 980 as a heavy duty and "high security" deadbolt. Those and others relate to physical force attacks or assaults on the lock. The next feature that I will describe is an upgrade in

manipulation (or picking) resistance. *Photograph 11*, shows an example of one of the new Kwikset driver/top pins used for the UltraMax model 980. They are spool type (pick resistant) driver/top pins. Their inclusion in the model 980 deadbolt should affect pick resistance. I don't know if it will be exactly the same on all locks of this series, but the first three pin chambers contained spool top pins and the last three chambers contained standard top pins.



**11. The new Kwikset driver/top pins used for the UltraMax model 980.**

One of the vulnerabilities to picking Kwikset locks has always been the wide beveled reversible bottom pins (which are still used with the model 980). In the past, picking has not been a particularly tough problem with Kwikset locks. Except in the case of a lock malfunction, I can't remember ever having to drill a Kwikset lock to gain entry. Most have picked fairly easily, but a few have taken a bit of time. Only time will tell, but the inclusion of spool pins may make me glad that the shear line is still unshielded, since I may possibly find myself using a drill from time to time to gain entry.

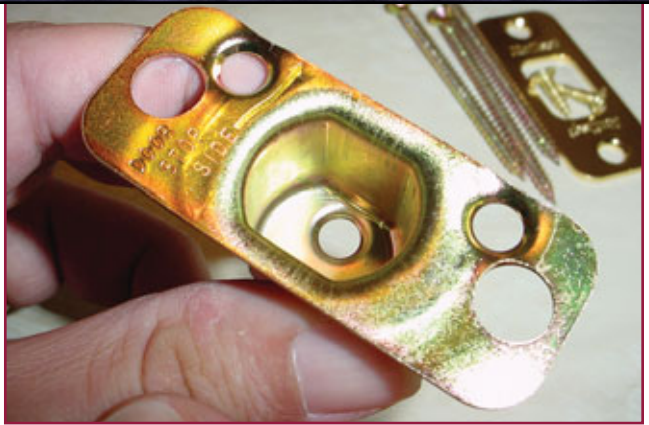


**12. The new locking bolt.**

There are a few other improvements found in the model 980 that should beef it up against physical assault. *Photograph 12*, shows the new locking bolt. It is still a 1" throw adjustable bolt, and it strongly resembles the other Kwikset adjustable bolts. As I mentioned earlier, though, the physical appearance is secondary to material construction and strength. The label above the bolt identifies the improvement in material construction. It says "Titanium Alloy Throwbolt Core."



Another physical upgrade can be found in the strike. *Photograph 13*, shows the seven parts that make up the UltraMax deadbolt strike package. There is a metal strike box and three 3" long screws to go with it, plus the outer strike plate with two  $1\frac{1}{16}$ " long screws. A closer view of the strike box can be seen in *photograph 14*. There are two offset holes on the front plate surface to maximize the likelihood of hitting the stud behind the outer door framing. There is a third hole at the back end of the box cavity area where the bolt extends into when the deadbolt is locked. That screw hole is also offset to line up with the stud. The three 3" screws are in those holes in *photograph 15*. That configuration seems to suggest a very solid



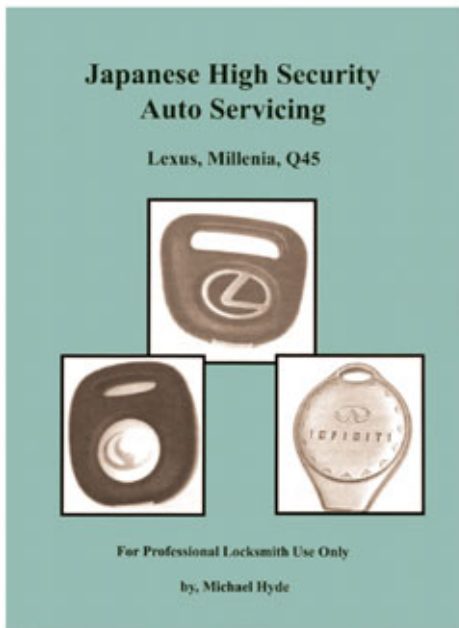
14. A closer view of the strike.



13. The seven parts that make up the UltraMax deadbolt strike.



15. The 3" strike screws.



## Japanese High Security

Some of the most profitable cars are also the trickiest to work on.

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**16. The outer strike plate and screws covering the strike box.**

anchoring of the strike box into the doorframe. *Photograph 16*, completes the setup with the outer strike plate and screws covering the strike box. One interesting feature of the UltraMax strike box is that it only requires a single 1" hole in the door frame for installation. It is the only one I know of that doesn't require you to mark the frame and then drill two separate overlapping holes (one above the other) to complete the strike box installation.

Kwikset has made some improvements on the inside thumb-piece component of the lock for the UltraMax deadbolt. The improvements can be broken down into three categories: strength, versatility and aesthetics.



**17. The inside thumb-piece.**

*Photograph 17*, shows the inside thumb-piece unit with no mounting screw holes visibly apparent and a backing plate with two mounting screws to its right. The thumb-piece unit is actually an assembly that must first be taken apart before it is assembled to the lock. Some clues as to how the parts separate can be seen in *photograph 18*. A small translucent plastic pin holds the actual thumb-piece to the unit where a setscrew will replace it later. A small cutout and tab can be seen toward the right side of the brass cover plate just above my thumb. You can also catch a slight glimpse of the paper separator sheet underneath the brass cover plate.

With the plastic pin pulled out, the thumb-piece has been removed and set to the side in *photograph 19*. The lock comes with an Allen wrench and two setscrews. Only one setscrew is needed, so I presume the extra one is a



**18. Clues as to how the parts separate.**



**19. With the plastic pin pulled out, the thumb-piece has been removed.**

spare. The brass cover plate can then be pulled off with help from the paper separator sheet. The cover is removed to reveal the inside mounting plate. (See *photograph 20*.)



**20. The cover is removed to reveal the inside mounting plate.**

### Assembling the Lock

An unprepared door will require drilling. If you are going to replace an existing deadbolt, you won't necessarily need to drill. If the crossbore hole is 2-1/8"



diameter, you won't need to drill, but you should use the adapter plate for 2-1/8" holes. If the existing hole is under a 2-1/8" diameter but larger than 1-1/2 inches, you should be able to install the model 980 deadbolt without the adapter or re-drilling the cross bore hole. I'll demonstrate the lock assembly without attachment to a door or a mount so that the insides can be viewed. This lock will assemble much like other Kwikset deadbolts except that we will have an interior cover (trim) plate and concealed screws.

In *photograph 21*, the two 1/4" diameter mounting screws go through the inside mounting plate and the backing plate. Earlier I mentioned improvements in the inside thumb-piece component in the areas of strength, versatility and aesthetics. We can cover two of those



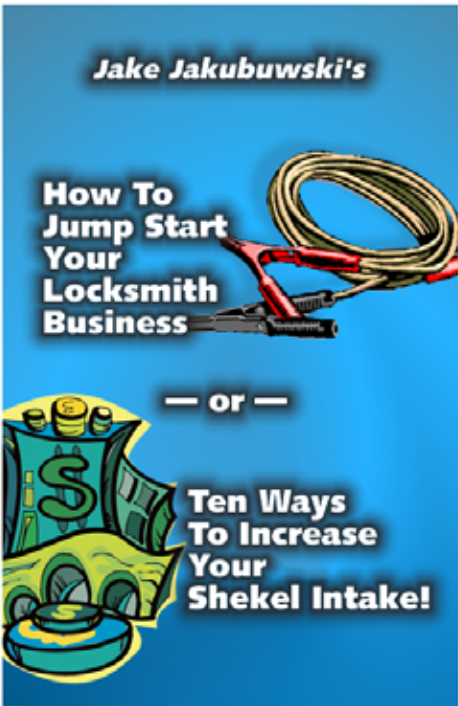
**21. Two 1/4" diameter mounting screws go through the inside mounting plate and the backing plate.**



**22. The mounting screws fit through the holes in the locking bolt.**

improvements here. Compared to something like the Grade 2 Titan deadbolts, the separateness of the actual thumb-piece allows for a thicker inside mounting plate that should make it stronger. In other Kwikset single cylinder deadbolts, the lock cylinder tailpiece fits directly into the thumb-piece. With a separate actuating component and separate thumb-piece, the tailpiece of the lock cylinder fits into a potentially deeper actuator that gives additional range for door thickness. This feature makes the lock more versatile by allowing installation in a door that is up to 2-1/4" thick without having to order a special thick door adapter kit that would include a longer tailpiece and screws. The aesthetic improvement will show up in a further step, when there are no exposed screws on the inside thumb-piece side of the lock.

*Photograph 22*, shows how the mounting screws fit through the holes in the locking bolt and fasten into the tapped holes of the outside lock assembly. After the



# How To Jumpstart Your Business

Anyone who's ever read anything that Jake Jakubowski has written is familiar with his style.

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#JUMPSTART






**23. The mounting screws are tightened.**

mounting screws are tightened in *photograph 23*, the inside brass cover plate is snapped into place in *photograph 24*. A close-up view of the interior assembly



**24. The inside brass cover plate is snapped into place.**

shows the dimpled indent where the setscrew will lock the thumb-piece into place. (See *photograph 25*.) The thumb-piece is slipped into place in *photograph 26*, and the setscrew is tightened down with the Allen wrench. The lock is completely assembled in *photograph 27*. Obviously, on an actual lock installation the strike plate assembly would also have to be installed. The installation procedure seems to be fairly straightforward and simple. With the crossbore hole range from 1-1/2 to 2-1/8", it should retrofit most door preps.

Another interesting feature for the UltraMax deadbolt is the ability to create key compatibility to other brand locks with optional lock cylinders having different keyways. Some of the other brands listed for compatible lock cylinders include Schlage, Master Lock (Master/Dexter keyway), and Weiser. While the standard keyed UltraMax model 980 and 985 deadbolts are available now, the different keyway optional cylinders may not be immediately available. The UltraMax is an interesting deadbolt lock and there is probably a good sized market out there for it. For additional information on any Kwikset products, call 800/327-LOCK or go to [www.kwikset.com](http://www.kwikset.com) on the Internet. 



**25. A close-up view of the interior assembly.**



**26. The thumb-piece is slipped into place.**



**27. The lock is completely assembled.**



# Key Chains & Key Accessory Merchandising

by Mike Avena



**O**k, you want to start selling key chains and accessories (or sell more than you are presently selling) and you're not sure where to start. Here are some good ideas on how to get started.

## Key Accessory Placement

Set aside some space in your shop to display key accessories. The area around your cash register is the most important space in your shop for selling key accessories. Most impulse sales will happen right there. Impulse sales are, by definition, purchases that a customer did not intend to make when they first entered your store.

You, as a retail locksmith business want to maximize the impulse sales of the customers who currently visit your shop, as well as add to your customer base by selling items not available anywhere else.

An impulse sale is defined as an unplanned purchase. A customer who comes in to have keys made may indeed have a key accessory in mind, like a belt clip perhaps. That is not an impulse sale. If, however, he comes in and hands you his keys to be duplicated, locates his belt clip on the wall and then approaches the cash register to find a cartoon character key chain for his daughter, you now have made an impulse sale.

By stocking and displaying a wide variety of key chains and key accessories you can increase your annual shop sales figures quite substantially with only a small investment. The retail mark-up on these items is anywhere from 100% to 400%. Unlike safes, key

accessories take up very little square footage in your shop and every customer who comes in to have a key made is a potential sale.

## Make the Items Accessible

The key is to make the items easy to reach and accessible. Let the customer touch and feel the items, this will allow them to 'try it out' before deciding to purchase. A large national electronics retailer has made a name for itself by promoting the fact that they let you 'play' with everything in the store. It works!

Hanging your available selection key accessories on the wall behind the counter will not work. Many people are too shy to ask to see an item and will not make a purchase without first touching the item.

Some of the shop owners with whom I've spoken to over the years expressed that pilferage is a concern, and that is why they refuse to leave these items on the counter. While this is a valid concern, I always reply that you must build in the cost of pilferage into the profit margin.



**Aluminum pull-apart key chains on a multiple product display card.**

For example, if you have an item that you buy wholesale for 75 cents and retail for \$ 1.50 consider raising the retail price to \$1.79 to cover some of the losses. And stop worrying about the few items that 'disappear,' the number and value is probably much smaller than you think. The increase in sales by placing these items within reach will far outweigh the few items that get stolen. Look around your area; do other retailers put low value items out of reach?

**Continued on page 66**



**Floating Key Chains on a multiple product display card.**

Continued from page 64

### Keep It Fresh

Another concern is to keep items fresh and moving. Keep the merchandise clean. I cannot stress this enough. The locksmith industry is pretty unique in this area. The reason for this is that all those keys being cut create a fine metallic dust that lands on everything. Keeping up with the cleaning is a tough job, but it is a necessary job. No one wants to buy an item that is dirty, or worse, looks used. A light dusting once a week should suffice. Perhaps items that have been around for a while will need a little more attention.

Another good solution is to keep the key machines as far away from the merchandise as possible. If that cannot be done, then consider enclosing the immediate area around your machines with clear Plexiglas. This will reduce the dust and help keep the entire shop clean.

Let's face it, we all have items in the store that just don't sell. Don't try to hold your ground and keep the price. Cut the price, move the goods, and try something different. I have a lot of retail shops that keep a 99 cents bin on the counter just for

this purpose. Keeping money tied up in product that doesn't move is counter-productive. Sell it at cost and recover your investment to buy new merchandise.

Beyond the items that don't move are the items that move very well. Keep your displays filled. In the supermarket I worked in as a teenager, we called it 'facing.' This gives the appearance of a full display, even if you are out of a few items. Sometimes you will have a hook with six items and the hook next to it is empty. Take the hook with six items and make two hooks with three

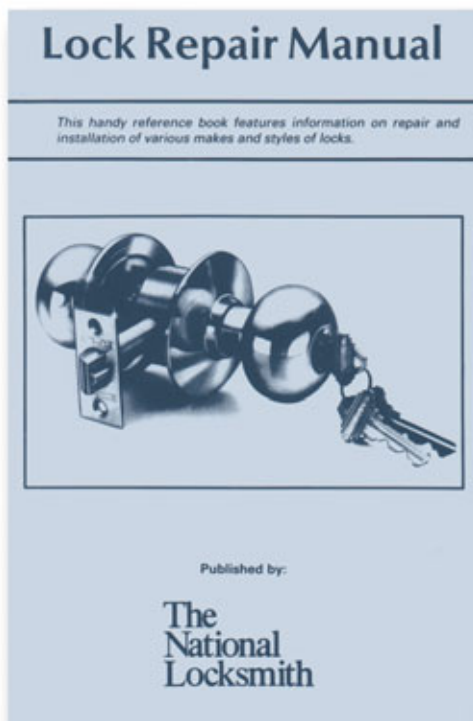
each. This makes the display look full. I do not subscribe to the theory that if a few items are missing it looks like the item is selling well. Empty displays do not sell product.



**Key ID Tags in a counter display box.**



**Birthstone Key chains on a rotating wood display.**



## Lock Repair Manual

Here, under one cover you have a tremendous amount of lock servicing information. Next time you run into a problem chances are you'll find the answer in the Lock Repair Manual.

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#LRM - 1



Rotate stock. The lock deicer that sold so well in January is not going to sell in July, no matter how much you lower the price. Put the left over stock in the back or behind the counter, and put it back on display in October. Move the displays around every so often, see what works and what doesn't.

### New Items

Try something new. Tastes change, styles change, and as we all know change is constant. Try to keep up with what's new and hot. Look at what kids are carrying; key chains are not just for holding keys anymore. At my son's elementary school all the kids are

sporting key chains as decorations on their backpacks.

Key Accessories can be broken down into two categories, the basics (items we've been selling for years) and the novelties (trends and fads). While very little changes happen in the basics category, the novelty items are constantly changing and you need to stay on top of that. An item that sold well two years ago may no longer be popular and should be replaced with new items.



*Wrist Coils on a lexan display rack.*



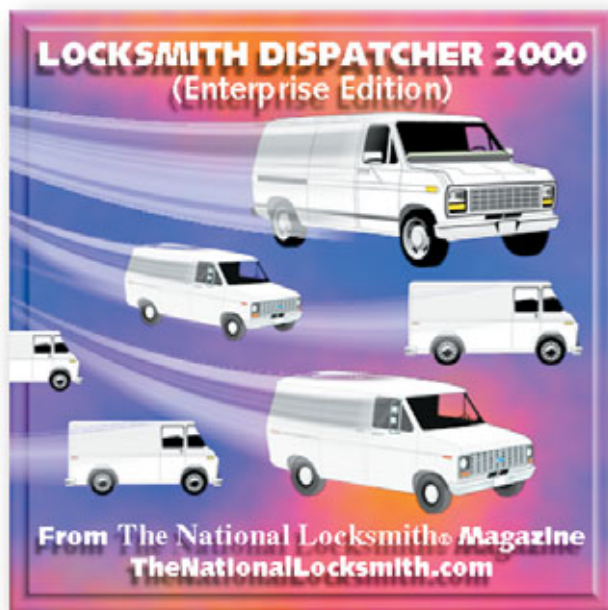
*Metal Belt Clips on a rotating wood display.*

### Display Cards, Racks and Boxes

Key accessories come in all sizes, shapes and styles. The way you display them can also affect sales. The most common displays for key accessories are the multiple product display card, display rack, boxes (for bulk items) and individual product cards. Each has a benefit and drawback.

The multiple product display card usually displays a dozen of the same item on a cardboard card. The benefit here is that it allows the customer to touch and feel the product and makes an attractive and inexpensive display. A drawback is that as items are sold, the display begins to look empty. A solution is to always have two cards of each item on hand, refilling the display card with product from the extra card.

Display racks work well for items that sell fast, and can also 'push an item to faster sales. A display rack can have more product information on it and can hold a lot of product, so that constant refilling is not necessary. Be sure to keep all the hooks on the rack fairly full of product so that it does not look empty. A drawback to display racks



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Controlled Service dispatching software specifically for the locksmith!

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**Belt Key Holder on an individual display card. Note how the card enhances the product description.**



**An example of bulk jar displays.**



**Key Identifiers in a counter display box.**



**Climber Clip Key Chains make a colorful display.**



**LED light in an individual display card.**



**Wallet Key-Pers on a descriptive display.**

is that some of them can take up a lot of valuable counter display area. Rotating displays allow more product to be displayed in the same area.

Bulk boxes work well for small products and in many cases is the only way to display certain products.

Individual display cards work well for items that have a higher value or cannot be displayed any other way. The drawback here is that some individual display cards do not allow for the touch and feel part of our sale equation.

### **Let the Profits Roll**

A well merchandised locksmith business will take advantage of all

four types of displays and their unique characteristics.

As far as which items to carry depends on your shop location and the types of clientele that pass thru your doors. A shop in an industrial location is not going to sell the same items as a shop in a main shopping district. Start small and expand your offerings as demand dictates. After a while you will gain the experience to know what your customers are looking for and want. Don't be afraid to ask customers what they want and also don't be afraid to try new items as they come along.

Don't only buy merchandise for your store based on your personal preferences. An item that you do not

care for, your customers may think is the greatest thing since sliced bread. I have been surprised on more than one occasion that an item I did not think would sell, did very well. Try to keep an open mind.

Following these simple suggestions should enable you to increase your retail impulse sales and ultimately your profits.

### **Happy Selling.**

Mike Avena is the president of Avco Key Supply. For more information contact Avco Key Supply at 220 Church Street, Northport NY 11768. Phone: 1-800 332-5397 Web: [www.avcokey.com](http://www.avcokey.com). **TNL**



# Keys & Key Accessories

## Perry Blackburne's "Rock Hiders"

Perry Blackburne, Inc. offers a countertop display box of "Rock Hiders." All eight rocks in the display box are slightly different in size and shape. The bottom side has a carved out cavity that allows one to put a spare key inside. These are perfect to place in a garden or within the landscape of your home. Now you never need to be locked out of your home again.



CIRCLE NUMBER  
320

This display is a perfect accessory for a locksmith's impulse sales. The boxes can be placed on a counter so customers are easily able to touch and feel the product, which is so very important.

## New Lucky Line Locking Key Cabinets

As part of its line of key systems and organizers, Lucky Line Products, Inc., is offering new, economically priced locking key cabinets. Made of attractive, durable, high-quality polypropylene, the cabinets are offered in two versions - a 72

key model and one which holds up to 216 keys.



CIRCLE NUMBER  
321

Each features easy-to-use locator panels. Secure and compact, the cabinets provide ideal organizers for business, vehicle fleets, apartment complexes, schools, etc.

## ESP Key Things Display

ESP Lock Products' "Key Things" point-of-purchase product display is designed to put a maximum amount of sales and profit into a minimal amount of space. The Key Things display rack puts 12 of ESP's best selling



CIRCLE NUMBER  
322

products in front of the customer for one-stop shopping. The factory-loaded display rack requires little space and may be used as either a freestanding or wall hanging unit.

## ILCO Groovy Keys

When stocked and displayed well, key accessories can contribute large amounts of profit to your business. One of the hottest items to come along in a while are the GROOVY key blanks now stocked by Keys Wholesale Distributors.



CIRCLE NUMBER  
323

These keys are referred to as accessories, because they need to be displayed prominently. They then become an impulse purchase not generally thought of for keys. When you buy the large assortment, a very colorful sign is included which helps call attention to these attractive keys. **RL**

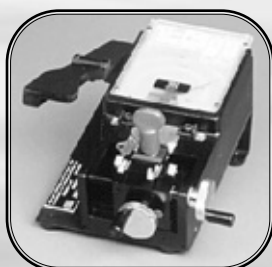
# TECHNITTIPS

## YEAR-END PRIZES



### **Grand Prize**

Silca Bravo Duplicator



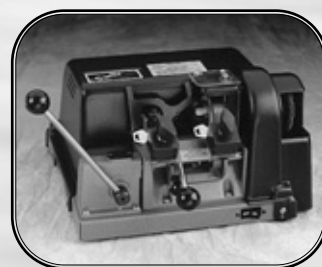
### **1st Prize**

HPC's 1200PCH  
Punch Machine



### **2nd Prize**

Mas Hamilton's  
PowerLever 2000



### **3rd Prize**

Curtis 2200 Duplicator



### **4th Prize**

SDC Magnetic Lock,  
Keypad and Exit Switch



### **5th Prize**

Securitron 12-Volt Unlatch Plug in  
Trans & Touchpad Retail Value \$650



### **6th Prize**

LaGard "SmartGard"



### **7th Prize**

Detex Advantex



### **8th Prize**

Arrow 400 Series Alarmed  
Exit Device & S-75 Mounting  
Plate Kit for Narrow Stile  
Aluminum Doors



### **9th Prize**

\$500 in BWD Products



### **10th Prize**

\$500 in ASP Auto Locks



### **11th Prize**

\$500 in Strattec Auto Products



### **12th Prize**

Tech-Train "Jiffy Jack"



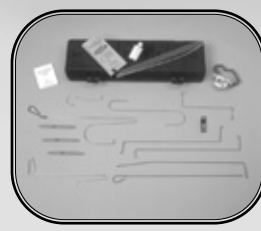
### **13th Prize**

Sargent & Greenleaf 6120  
Electronic Safe Lock



### **14th Prize**

High Tech Tools  
2000 Pro Set



### **15th Prize**

Slide Lock's Master "Z" Tool Set





**16th Prize**

ESP Products Sampler



**17th Prize**

Major Manufacturing's  
HIT-111 Drill Guide



**18th Prize**

Abus Padlock's Marine  
Padlock Display (\$120 Retail)



**19th Prize**

MBA USA, Inc.  
Falle Pick Set



**20th Prize**

Baxter JV-1 & JV-5  
Code Books



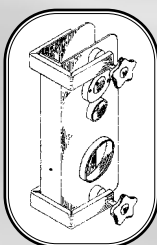
**21st Prize**

Sieveking Products  
Squeeze Play



**22nd Prize**

Rodann's RV500 Wireless  
Door Annunciator System



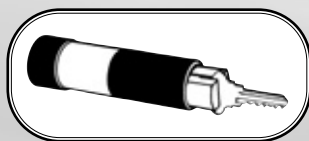
**23rd Prize**

A-1 Security Manufacturing  
Installation Jig



**24th Prize**

Keedex Sampler



**25th Prize**

Framon  
Impressioning  
Handle



**26th Prize**

Gator Tool Multi-Purpose  
Facecap Tool

## These Prizes Awarded Each Month!

• Wedgeco™  
Key Extractor  
Kit

• Strattec  
Racing Jacket

• HPC Air  
Wedge™

• Sargent And  
Greenleaf  
4400 Series Safe  
Deposit Box  
Lock

• A-1 Security  
Products

• ILCO Key  
Blanks (100  
Blanks)

• Keedex "SPIN  
OUT"  
Screwdriver

• Tech Train  
Training Video

• Sieveking  
Products  
Gm E-Z Wheel  
Puller

• Major  
Manufacturing  
Products

• Slide Lock's  
"Z" Tool  
Opening Set

• The Sieveking  
Auto Key Guide

• Jet Key Blanks  
(100 Blanks)

• High Tech  
Tools

• LaGard Combo  
Guard

### Send in your tips, and win!

#### How To Enter

Send a tip on how to do any aspect of locksmithing. Certainly, you have a favorite way of doing something that you would like to share with other locksmiths. Write your tip down and send it to:

Jake Jakubowski, Technitips Editor,  
The National Locksmith  
1533 Burgundy Parkway  
Streamwood, IL 60107-1861

Or send your tips via  
E-mail to: Natlock@aol.com

#### Rules & Regulations

Each tip submitted must include your full name, street address (no P.O. Box numbers), city, state, zip code, phone number, fax number and e-mail address. **When sending tips via e-mail make sure to include complete address and phone.**

#### Every Tip Published Wins

If your tip is published you will win one of the monthly prizes listed. At the end of the year, we choose winners from all the monthly tips published, that will be awarded one of the fabulous year end prizes. All you have to do to win is enter.

Prizes are arranged according to suggested retail price value.

Tips Start  
on Next Page





BWD KWIKIT  
WINNER:  
**Ford 10-cut  
Ignition Tip**

I'm sure you've all seen this problem too many times. Those pesky Ford 10-cut ignition locks and how easily the "ears" can break loose and actually spin around without a key being inserted.

A couple of solutions are to either replace the ignition lock, which I usually do unless I'm out of stock, or drill a small hole and install a roll pin.

Both are great problem solvers and I would recommend either. But if you are ever in one of those situations where you do not have an extra ignition lock in stock or your fresh out of roll pins, then consider this third alternative.

I just discovered another method that seems to work very well. Loctite® (red) seems to me to be a quick and viable fix. Knowing how strong red Loctite® was, I just had to try it on one of the Ford 10-cut ignition locks I had encountered where the faceplate would spin on the ignition.

After several experiments, I found that I really had to abuse the ignition lock to get the wings to break the Loctite® bond. When I say abuse, I mean using a pair of pliers or large Crescent® wrench to force the ears. I find the tabs will break before the Loctite® bond.

The following is a description of the procedure I use:

Remove the ignition lock and completely disassemble it. Do not remove the tumblers, springs and retainer cover. Clean the area right behind the faceplate where the plate was originally press fit to the ignition assembly.

A good cleaning solvent that cuts through grease and grime will work. I use Houdini as my cleaner.

Once the area has dried, make sure the cap and ears are properly lined up and insert a blank key. Check to make sure the keyway and key blank are uniform and properly aligned. Next place the ignition in a vise, making sure the head of the key and wings are horizontal. Also make sure the faceplate extends beyond the vise's jaws.

Now you are ready to apply several drops of the red Loctite®. You will only need to apply four or five drops around the ignition housing where the ears were originally pressed on. I like to apply 2–3 drops on one side and then

## A Few Words From Jake...

The 11<sup>th</sup> of this month marks the one-year anniversary of the WTC/Pentagon attacks. As of the writing of this column (in June) there have been no further terrorists attacks (with the exception of the Anthrax scare) against any target—at least as far as we know—within the United States. For that we can all be thankful.

Also, we should all take at least a moment to remember what happened in New York, Pennsylvania and at the Pentagon. We need to remember those that died with no chance to defend themselves. We need to remember those that survived and bear the emotional and financial scars of those attacks. And, we need to remember the folks on the plane that fought against the hijackers and, at least in my mind, stopped that plane from being used to destroy another building full of civilians.

But above all, I think we should remember to never forget and never let our guard down, again. As was once said: "The price of Freedom is eternal vigilance."

Last December I wrote in this column, that the diversity of peoples, customs, cultures and religions blended together in America's "melting pot" is what makes us strong. Our unique, homogeneous, culture and "can-do" spirit allows us to overcome virtually any adversity that befalls us. The only thing our strength is not immune to is apathy. If enough of us forget, if enough of us become complacent about our freedom, if enough of us fail to remember the lives sacrificed last year, then those that want to destroy, tear-down and overthrow America and her freedoms will win the battle.

Whether your ancestors were Polish, Ukrainian, Irish, Jewish, Arabic, Native American, Pakistani, Spanish, Korean, Vietnamese, English, of unknown origin or a blend of a dozen other nationalities—if you were born here or naturalized—then you are an American. As citizens of the freest society on earth, join with me in remembering the victims, the survivors and the heroes of September 11<sup>th</sup>, 2001.

None of us escaped that date without some sort of emotional, spiritual or physical trauma. We were all victims of a megalomaniacal fanatic's dream of destruction and devastation who uses religion, disinformation and ignorance to fan the flames of hatred and fanaticism.

So, on September 11<sup>th</sup>, 2002 let's not only remember the victims of that fanaticism—let's also remember that if we fail to remember, and guard against terrorism, we may very well lose our freedom.

See y'all next month.



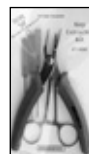
by Jake  
Jakubowski

take a small bladed screwdriver and smear the drops around the housing. I make sure not to get any Loctite® into the keyway or on the key. Once the Loctite® starts to set, I will turn the ignition lock over and repeat the solution application.

Let the Loctite® dry. Usually no more than 15–20 minutes. Once the Loctite® has dried, the faceplate with the ears will not come loose for a long time. Reassemble the lock and test it with the original key. Make sure it is operating properly before you reinstall the lock back into the column.

From start to finish it is about a thirty-minute job. Keep in mind that I recommend this method only be used as a last resort.

Woody Quiñones  
Florida



WEDGEKO KEY  
EXTRATOR WINNER:  
**Another Approach to  
Ford 10-Cut Fix**

Using roll pins to prevent the ears from spinning on a Ford 10-cut ignition is a nice way to repair the problem. However, I have found that a .350 Lab pin also works well.

Simply align the keyway, faceplate (use a blank key), and drill the proper sized hole. Put in a dab of SuperGule® or Loctite® then the Lab pin and the job is finished.

Although the roll pin is very secure, I have found that the Lab pin works just as well and only takes about ten minutes to do the entire job. Fast, simple and easy. And, best of all, we all have pinning kits on the

**Continued on page 82**



Continued from page 80

truck, so there's little hunting for the right part to do the job.

Brian Bristow  
California



STRATTEC WINNER:  
**Bump Key Tip  
Modification**

In the October 2001 issue of *The National Locksmith* magazine, there was a lengthy article on bump keys by Sal Dulcamaro. I deal with quite a few commercial grade Schlage 6-pin mortise, knob, and lever locks where

the keys have often been lost. I thought that the bump key procedure as described by Sal would be worth trying. I figured it couldn't be any worse than picking, drilling, shimming, cursing and muttering to myself.

After reading the article and playing with Sal's method, I found to my amazement that it works extremely well—with one minor modification. I used an 8-32x3" machine bolt, fastened it to the head of a cut key with a lock washer and nut. (See photograph 1.) This gave me a permanently

mounted turning wrench that doesn't fly off when you tap the key. I also placed some heat-shrink tubing over the end of the key.



Photograph 1.

As the article stated, I cut all six cuts one-quarter depth deeper (that is: a 9 becomes 9-1/4). I found that if I pull the key back two cuts, put turning pressure in the direction I want the key to turn, and ten tap the key, it seems to work best for me.

I will say that although this process works very, very well, it doesn't work every time. However, it works well enough for me that bump keys are going to become an integral part of my tool arsenal.

Dennis Harmon  
Colorado



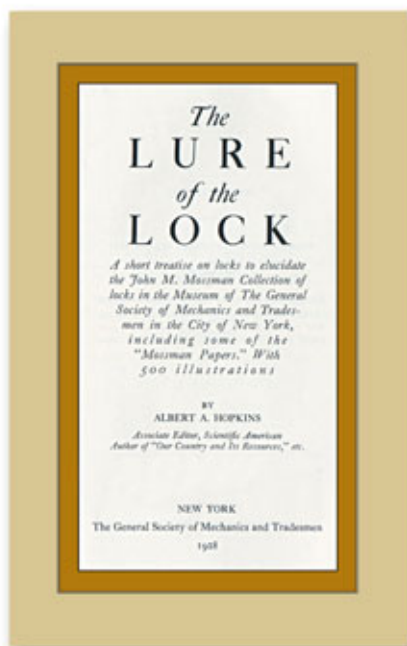
HPC WINNER:  
**Keyless Deadbolt  
Opening Tip**

There are as many, if not more, apartment residents in my city that have keyless deadbolts on their doors, as those who do not.

Often I am called to unlock a door and find out, upon arrival, that the lock that needs to be defeated is none other than a keyless deadbolt. Yes, I know... these can only be locked from the inside since there is no outside keyhole. However, sometimes the resident has left the apartment from the patio or balcony after latching the keyless deadbolt without realizing it. To compound their problems they also, somehow, locked themselves out on the patio or balcony by slamming the sliding door.

On a patio there's usually no big problem unless a charley bar or similar bar has fallen down. On a balcony? Well, I don't know how they got down, but I'm not climbing up.

# The Lure of the Lock



This hardcover book, compiled in 1928, features dozens and dozens of beautiful photographs on ancient through modern locks.

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#LURE

On a recent call, a lady had told her 3 year-old nephew to lock the door when she left and he did—even the keyless deadbolt. Then he fell asleep. The mother had knocked and banged on the door without being able to awaken the boy. Finally, she called me.

I found the best and easiest way to open this type lock was to drill a  $\frac{1}{4}$ " hole through the metal cover of the door and a little way into the wood. Of course, I was careful not to drill straight through the tailpiece hole. After drilling my hole, I simply stuck a screwdriver in and turned the latch.

Most of these apartment keyless deadbolts that I have encountered seem to have their latch holes seven inches above the keyed deadbolt, with a standard  $2\text{-}\frac{3}{8}$ " backset.

I set my drill bit between  $2\text{-}\frac{3}{8}$ " and  $2\text{-}\frac{1}{2}$ " from the edge of the door. Sometimes, I can either see or feel with a plastic strip where the latch is located and just measure the  $2\text{-}\frac{3}{8}$ " from that location.

After getting the door open, it's a simple matter to take some epoxy and fill in the small hole I drill.

*Joan Yarrington  
Texas*



SARGENT AND  
GREENLEAF  
WINNER:  
**Drill Guide Tip**

It always seemed to take me too long to install a doorknocker or viewer, because of the care I had to take when drilling holes straight through the door. If the drill is angled a bit up, down or sideways, the hole on the inside of the door will not be centered properly. I've tried many things but the best guide I've ever found is easy to make and easy to use.

All you need is a spare part from the right handle set. This is the piece that secures the bottom of the handle set to the door. Most handle sets come with a screw for a wood door and a threaded through-the-door piece for metal doors.

You need a through-the-door piece with a large flat head on the inside. Some brands have a special washer that fits over the end. Schlage makes one that is perfect for this. If not, you can probably supply your own washer, which should work just as well.

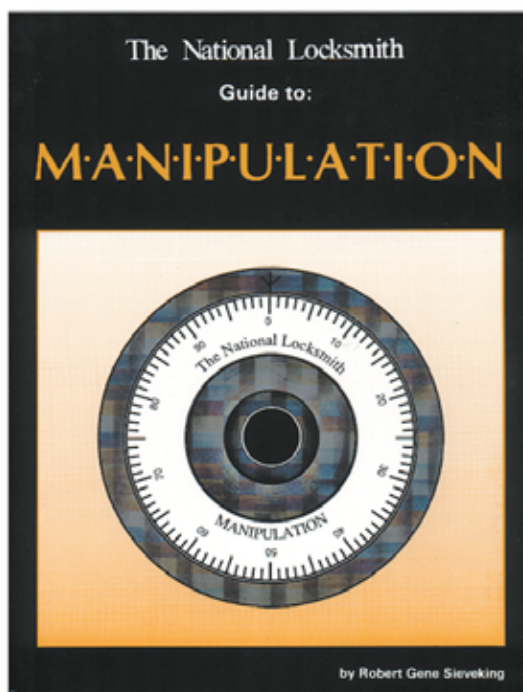
The tip is to take the largest drill bit that will fit and insert it into the threaded part. Using the part itself as a guide, drill straight through until the drill bit comes out the other end. Epoxy the large flat washer on, making sure it is at a right angle to the threaded part.

To use, just drill a  $\frac{1}{4}$ " hole where you need it on the outside of the door, insert your new drill guide until the flat washer is against the door and drill right through the door using the guide. The hole on the inside of the door will be exactly opposite the outside hole.

The above directions are for when a door is hollow which steel doors usually are. If the top of the washer is flat and parallel to the shaft, this tool can also be used on wood doors. On residential hollow steel or aluminum doors with a wooden stile, sandwiched between the outer "skins" the guide can be used by turning it around where the washer is against the door and the shaft points away from the door. Just hold it flat on the surface and use the guide as before.

*Ted Swirsky  
New Jersey*

## Manipulation Home Study Course

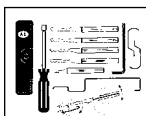


Our home study course guides you on step-by-step process, teaching you everything there is to know about manipulation.

[CLICK HERE TO LEARN MORE](#)

#MAN - 1





**A-1 SECURITY  
PRODUCTS WINNER:  
Door Viewer  
Installation Tip**

A customer asked me to install door viewers in several of their doors. While installing those viewers, my bit would wobble and make the holes too large. Now I had to find a way to cover the oversized holes.

For or a previous job I made brass circular escutcheons to mount lever locks on. I used these same escutcheons and drilled the correct sized hole in the center to cover up

the oversized hole for the door viewer. With the brass escutcheons around the viewers, the job looked even more professional and the customer was very pleased.

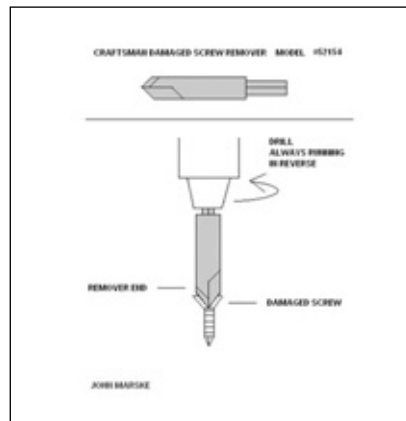
*C.G. Strickland  
North Carolina*



**ILCO KEY BLANKS  
WINNER:  
Damaged Screw  
Removal Tip**

The Craftsman Damaged Screw Remover (Model #52154) is available as a set of three removers with a pocket-sized case.

These tools are designed to remove Philips, slotted, Torx, Squared head screws and maybe a few others where a normal screwdriver will not grip due to damaged, or stripped heads. (See illustration A.)



**Illustration A.**

The remover sizes are #1, #2, #3 for screw sizes #6-#8, #8-#10, #10-#14 respectively.

I have had to use them several times and they are a welcome addition to my toolbox.

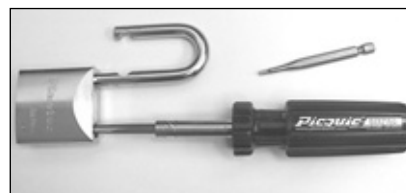
There are other versions available for bolts from *Sears* and also *Lockmasters*.

*John Marske  
California*



**KEEDEKX WINNER:  
Tool For Master  
Rekeyable Padlocks**

The tool shown in photograph 2, is what I use in place of hex wrenches when servicing Master padlocks.

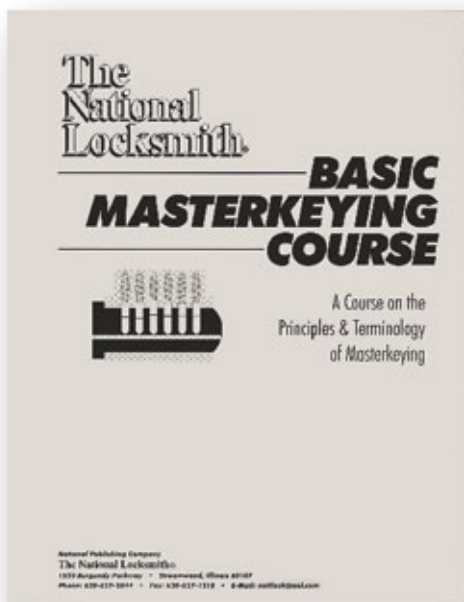


**Photograph 2.**

Since I service a large number of these, I wanted a faster and easier way to remove the retaining screw on the Master rekeyables. I started with a PicQuic (Model #PQ88001) Multi-Driver and added optional hex bits #B11333 ( $\frac{3}{32}$ ) and #B11376 ( $\frac{7}{64}$ ). This will handle all Master rekeyables except the No. 29, which requires bit #B11396 ( $\frac{9}{64}$ ).

I ground the shaft of the bits down a little to allow them to enter the padlock cavity easier.

# Basic Masterkeying Course



13 Lesson  
450 page course

The Basic Masterkeying course is designed for the locksmith who wishes to become proficient in Basic Masterkeying.

**CLICK HERE TO LEARN MORE**



#MK - 1

I assume these screwdrivers are available in the U.S. but if not, there are probably similar ones that will work as well. They are manufactured in Canada, but I'm sure they are exported to the U.S. as well.

*Terry Heinrichs  
Canada*



TECH TRAIN  
TRAINING VIDEO  
WINNER:  
**Schlage Cap**

#### **Retainer Substitute**

Have you ever lost the small cap retainer pin on the end of a Schlage cylinder? You know; the one that is spring-loaded and if you're not careful, can go flying off, never to be seen again?

Well, it happened to me again! I was on a call a considerable way from the shop and as I took the cap off the back of the plug the retaining pin came out of the hole like it was shot from a rifle!

After much frustrated looking around the van without finding the errant pin, I began looking for a substitute.

What I found was that a small Pop-Rivit® made a workable substitute. Of course, I had to cut it to the proper length but the point on the Pop-Rivit® fit snugly into the serrations on the retaining cap and the shaft of the Pop-Rivit® was thick enough to prevent the new retaining pin from jumping out of the hole, past the retaining cap.

*Virgil Ertle  
Indiana*



SIEVEKING  
PRODUCTS GM E-Z  
WHEEL PULLER  
WINNER:  
**Corbin Mortise**  
**Opening Tip**

A non-functioning bolt on an apartment door with a Corbin mortise lock and cylinder made it necessary for me to drill for the cylinder retaining screw at the 3 o'clock position. After cutting through the screw with my drill, I unscrewed the cylinder and manipulated the bolt back with the tip of a long screwdriver.

After getting the door open, I looked for a cause for the lockout and noticed that the door, around the mortise lock, was bulging outward. Apparently, the door had been forced open during an earlier break-in. The lock was loose in the cutout and wobbled a good bit.

I took the lock out of the door and found that because the lock was loose and apparently vibrating when the door was closed, the housing or cover plate screws had loosened enough to allow the cover to move, causing the bolt retractor to come out of it's slot and malfunction.

I reassembled the lock, inserted a new retaining screw, put the cover plate back on and used a little Loctite® to help prevent the screws from loosening again and put the lock back on the door.

Although I did not have one on my van, I suggested that the

customer allow me to order a mortise lock reinforcing wrap-around plate from MAG, which would cover the damaged area of the door and prevent the problem from reoccurring.

*David Craig  
Illinois*

**Major**  
MANUFACTURING, INC.

MAJOR  
MANUFACTURING  
PRODUCTS  
WINNER:

#### **Warded Padlock Pick Set Tip**

When I bought a set of warded padlock picks, I put them on my key ring with my house keys and forgot

## **Dave McOmie Safe Book Collection on CD**



This CD contains every book Dave has ever published.

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#DMCD - 1



about them. I may have used them once or twice during that time, but I really never did much with them. Then last week, I was with my daughter when she left her keys in the ignition of her 1987 Toyota Camry and locked the doors. Since it was a warm day, I didn't have my jacket with me and my regular picks were in one of the jacket pockets. And since we were in my daughter's car, I didn't have any opening tools with me.

The only picks I had were the warded padlock picks. Thinking that there was no way it could really work,

I decided to give them a try since it was our only option aside from calling a locksmith to open the car.

Much to my surprise, the small single ward pick unlocked the door almost as easily as using the key! (See illustration B.)

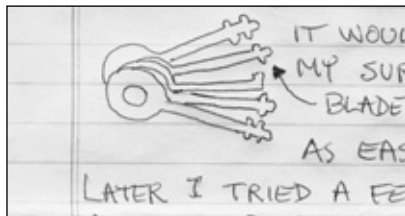


Illustration B.

Since then, I have tried it on a few other vehicles and have opened a Dodge D-50 pickup, a Nissan pickup and the back door on my RV! I'm anxious to see what other vehicles this pick set can open.

Jim Gerard  
California



SLIDELOCK'S "Z" TOOL  
OPENING SET WINNER:  
**Determining Number  
of Pins In an I/C Core**

When called upon to service an interchangeable core, it is necessary to determine whether you are dealing with a five, six or seven pin core. This information is particularly important if you are trying to remove a core without a control key and the biting of the control key is unknown. That means, of course, that you must drill the core to remove it. If you drill too far you risk destroying a part of the lock housing.

An obvious way to gauge core length is to take a key blank and insert it all the way into the keyway until it bottoms out against the tip stop. Mark the blank with a marker at the face of the core, then remove the blank and measure the distance from tip of key to the mark.

A five-pin core will measure  $1\frac{5}{16}$ " from the tip to the mark on the blank. A six-pin will measure  $1\frac{3}{32}$ " and a seven-pin will measure  $1\frac{1}{4}$ " from the tip.

Next, mark a #8 drill bit with the appropriate measurement, then center punch the core just below the bottom and between the letters "E" and "S" in Best. If you have an Arrow, Falcon, or other A-2 system, determine the center of the bible just under the letters and at least  $\frac{3}{8}$ " above the top of the plug. Drill to the depth marked on the bit.

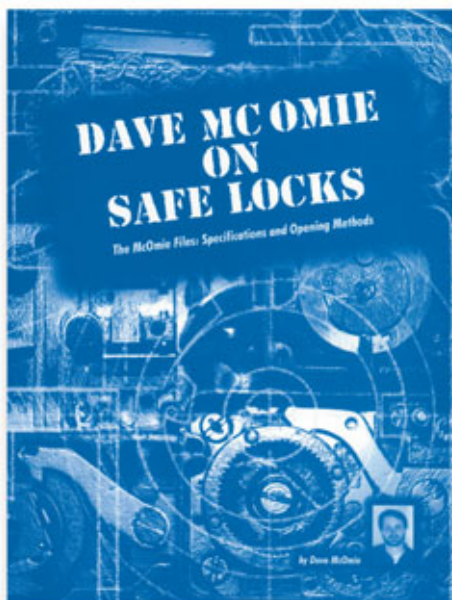
After drilling you should see part of the leftover control lug in the upper left hand side of the drill hole. If the control lug is not yet visible, pry the face cap off with a pointed punch. Then use a small flat screwdriver to pry the lug over to the right and then pry the core out of the lock housing.

Another way to determine core length (a method I prefer) is to cut a number 4 depth on the upper portion of the tip of a key blank for that keyway. The blank is then inserted slowly to the back of the core, counting "pin clicks" as it is pushed in. I use this method whenever I have to pick the core as it tells me how many pin stacks I'm dealing with.

Doug Olenick  
Canada

TNL

## Dave McOmie on Safe Locks



Almost 300 pages of information, photographs and illustrations give you every scrap of information about a huge variety of safe locks.

CLICK HERE TO LEARN MORE

#DMSL - 1



# 2000 Kawasaki Concours

Part 2



by  
John Blankenship



## Seat Lock



1. The seat lock is located on the left side of the motorcycle below the rear of the seat and behind the plastic bodywork. Pick the seat lock or use a key to turn the plug 45 degrees clockwise against spring pressure and hold it there while you lift up the back of the seat. The spring will relock it when you let it go.

3. With the seat removed, you have access to the rear of the seat lock. You have to remove the plastic bodywork to remove the lock housing but the plug can be removed by removing the C-clip, tailpiece, and spring so you can push the plug out the front. The seat lock plug contains wafer tumblers in all six spaces.

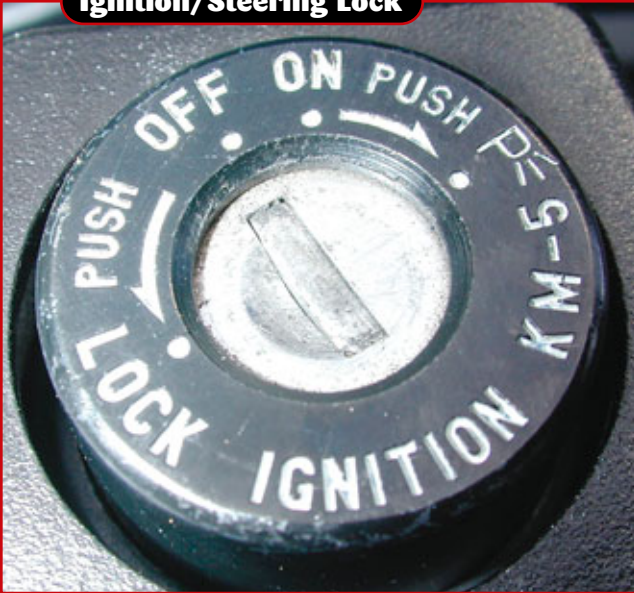


2. The rear of the seat has been raised revealing the dual seat latches. Now just pull it to the rear and remove it from the motorcycle.

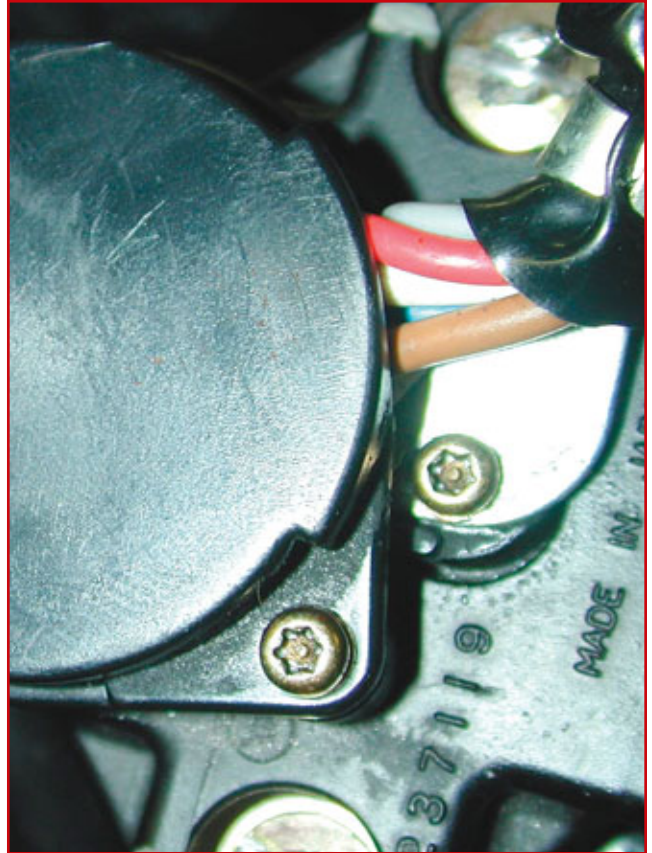




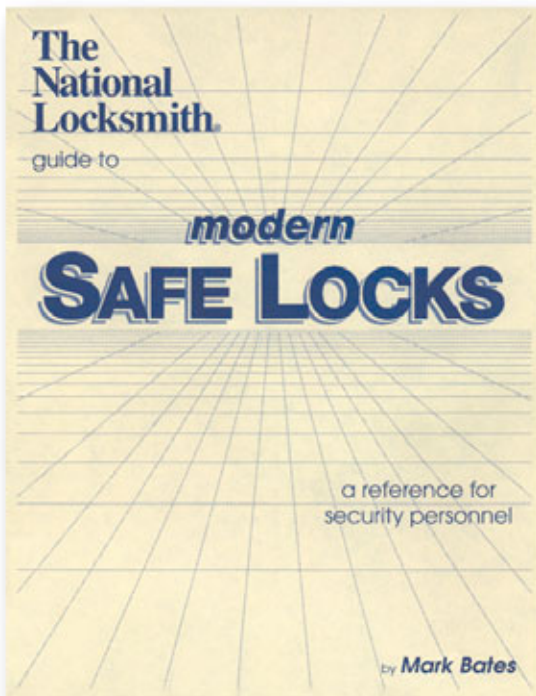
#### Ignition/Steering Lock



4. This motorcycle uses a KM-5 ignition/steering lock. The lock is shown in the OFF position, which means the ignition is off and the steering is unlocked. To lock the steering you need to turn the steering all the way to the left or right, push the plug in, and turn it counterclockwise to the LOCK position. You do not have to push it in to turn it from LOCK to OFF or between OFF & ON. You do have to push it in to turn it from ON to P, which means the ignition is off but the parking lights are on. Two shearhead bolts secure this lock from underneath and there is not enough room to remove them without some disassembly. I did not disassemble this lock but I did manage to obtain a KM-5 ignition lock to disassemble for this article.



5. The switch is secured to the back of the lock by two T-10 tamper resistant Torx screws. Remove the lower screw that secures the plastic cover and remove it.



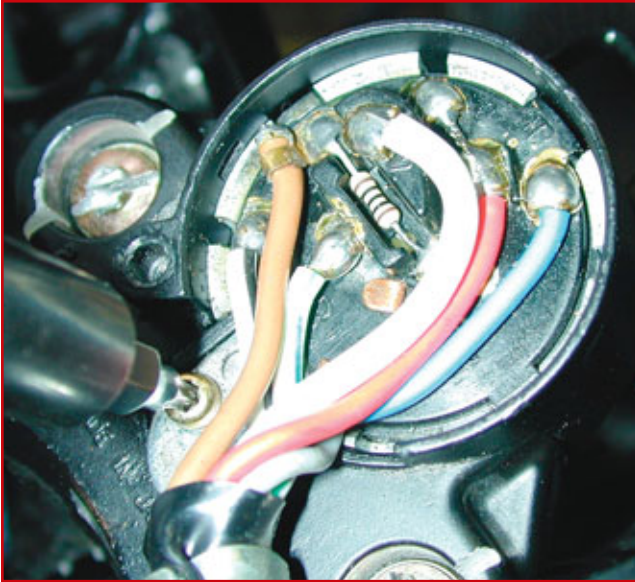
## Modern Safe Locks

You always wanted to make money servicing safes?

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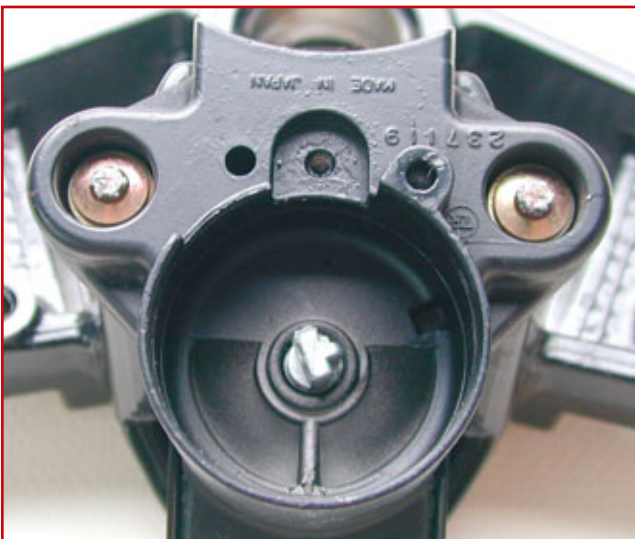




6. Now remove the other screw and you can pull the switch out of the housing. At least one of the soldered connections is energized with 12 volts DC. Either disconnect the battery or make sure you do not touch the contacts to metal.



7. The switch has been removed from the housing.



8. The lock is secured to the bottom of the triple-clamp by two shearhead bolts.



9. I used a Dremel to cut screwdriver slots in both shearhead bolts and removed them with a screwdriver.



10. The lock has been removed and is free to be worked on.



11. Use a screwdriver to pry up the plastic locking flaps on both sides of the lock housing so you can slide the cover off the front.



A close-up photograph of a black metal fitting, likely a part of a mechanical assembly. The fitting has a hexagonal base with two small circular holes. A central threaded hole is visible, surrounded by a flange. The surface shows signs of wear and some greenish corrosion or residue.

# Modern Safe Opening

## Modern Safe Opening

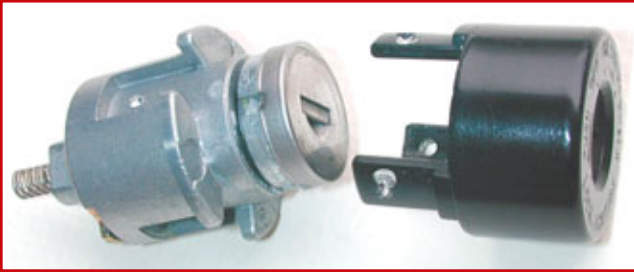
Technical drawing of a drill bit, showing various views and dimensions:

- Left View:** A side view of the drill bit showing the **HEAT TREATING** area, the **FLUTE**, and the **NECK**.
- Top View:** A top view of the drill bit showing the **RELIEF ANGLE**, the **POINT ANGLE**, and the **THE CHIP BREAKER**.
- Front View:** A front view of the drill bit showing the **RELIEF ANGLE** and the **POINT ANGLE**.
- Side View:** A side view of the drill bit showing the **RELIEF ANGLE** and the **POINT ANGLE**.
- End View:** A circular end view of the drill bit showing the **RELIEF ANGLE** and the **POINT ANGLE**.
- Scale:** A scale bar showing dimensions in **Milli Meters** (0 to 3).
- Compass:** A drawing of a compass.
- Protractor:** A circular protractor showing angles from 0 to 90 degrees.
- Drill Bit:** A photograph of a real drill bit.



September 2002 • 91





15. The facecap has been removed from the cylinder. Both parts were secured to the housing by the three pins.

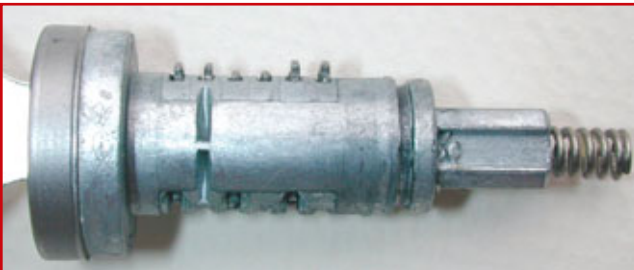


16. The stop plate is shown on the back of the plug. It restricts the plug to the OFF & ON positions unless you push it in so you can turn it to the LOCK or P positions. Remove it for disassembly.

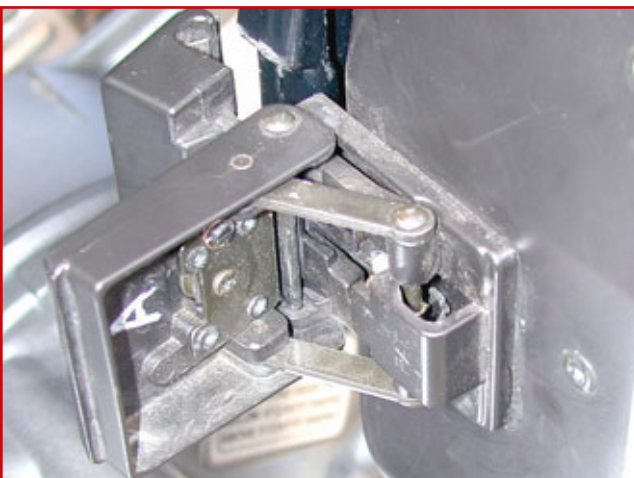
17. A snap ring secures the plug in the cylinder. Remove it and push the plug out the front. Be careful and do not allow any wafers to fall out.



18. The plug has been removed from the cylinder. I left the secondary stop plate in the cylinder. It restricts the plug from turning past the LOCK & P positions.



19. The plug contains all six wafer tumblers. It is designed to shear at the second wafer chamber if a screwdriver is used to force the lock.



21. The latch that secures the luggage to the motorcycle has been opened to release the luggage. The A on the underside of the latch lever is the key code. You can now tilt the bottom of the luggage away from the motorcycle, slide it back a few inches, and lift it off.



20. This is the luggage on the left side of the motorcycle and the luggage on the right side is a mirror image of it. This luggage is original equipment on the Concours model. Each piece of luggage has three latches; the two on top secure the lid and the one on the front secures the luggage to the motorcycle.



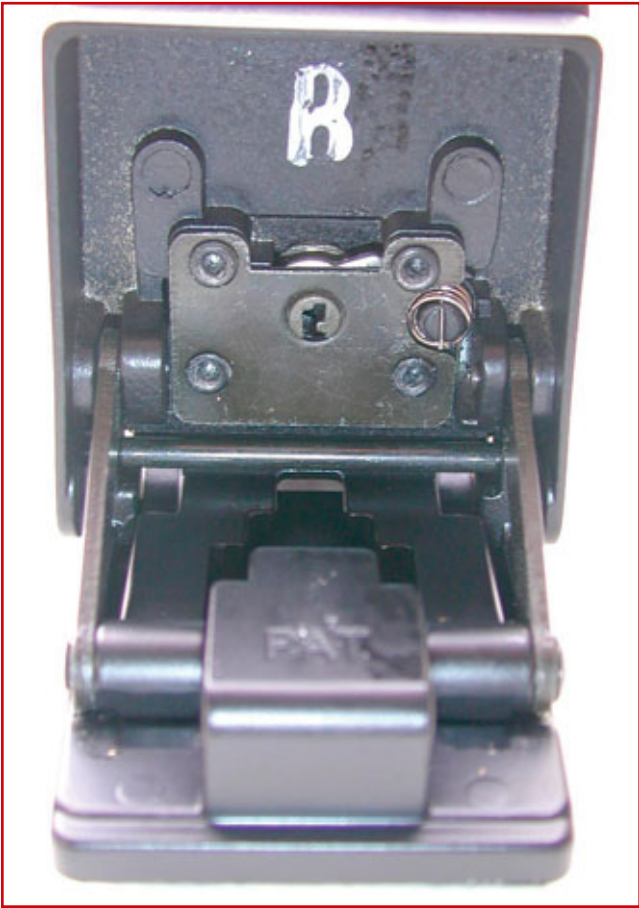
22. The luggage has been removed from the motorcycle.



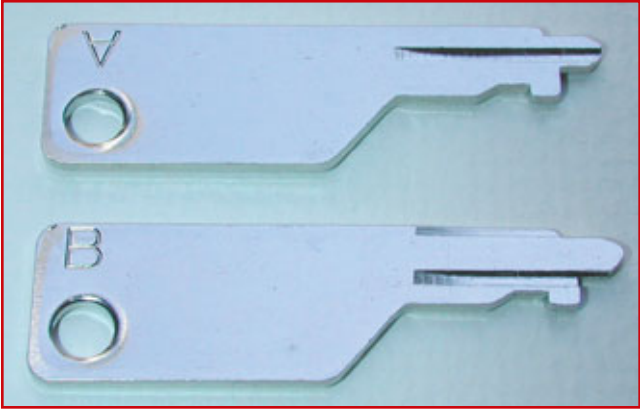
Continued from page 92



23. This is a new luggage latch with the key inserted into the lock. Turn the key 360 degrees counterclockwise to unlock it or 360 degrees clockwise to lock it.



24. The latch lever is raised on the new latch and reveals a poorly stamped B, which is the key code.



25. These two keys together will work all of the Concours luggage locks because there are only two key codes, A & B. The A key on top and the B key on bottom are the reverse of each other. The keys are available at Kawasaki dealers. The part number for the A key is 27008-1127-AA and the part number for the B key is 27008-1127-BB. The price was \$5.69 each.



26. The luggage latches are secured from inside the luggage by three Phillips screws.

**Specifications**

Codes: Z5001-Z6000										
Blank: Ilco: X103 (KA14); Curtis: KA16; Silca: KW7; Jet: KA-14NP										
Spacing: 1=.098 2=.197 3=.295 4=.393 5=.492 6=.591										
Depths: 1=.258 2=.238 3=.218 4=.199										
Card Number: CMC50										
DSD Number: 420										
ITL Number: 259										
Curtis: KA-1 cam & KA-1A carriage										
Tumbler locations:										
1 2 3 4 5 6										
Ignition	x	x	x	x	x	x				
Glove	x	x	x	x	x	x				
Seat	x	x	x	x	x	x				
Gas			x	x	x	x				
Helmet	x	x	x	x						



# FREE Code Cards!

from The National Locksmith®

COLLECT 'EM ALL!!

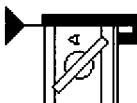
Spaces		Depths		Cutter: CW47MC		IC #: 903	
mm	Inch	mm	Inch	Jaw: A	Series	Original	
1	2150	846	1	820	323	50000-69999	
2	2010	791	2	755	297		
3	1800	709	3	690	272		
4	1660	654	4	625	246		
5	1450	571					
6	1310	516					
7	1100	433					
8	960	378					
9	750	295					
10	610	240					

**Key Blank Mfr.**

Boorkey	162300T10
Errabi	T04TY37RP
Iico	TOV43AT4
Jet	TR47-PHT
Orion	T10TV51A
Silca	TOV43AT4

**Blank #**

162300T10
T04TY37RP
TOV43AT4
TR47-PHT
T10TV51A
TOV43AT4



Align: Black horse shoe tip stop

The National Locksmith®

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Spaces		Depths		Punch		IC #: P903	
mm	Inch	mm	Inch	Jaw: A	Series	Original	
1	2150	846	1	820	323	50000-69999	
2	2010	791	2	755	297		
3	1800	709	3	690	272		
4	1660	654	4	625	246		
5	1450	571					
6	1310	516					
7	1100	433					
8	960	378					
9	750	295					
10	610	240					

**Key Blank Mfr.**

Boorkey	162300T10
Errabi	T04TY37RP
Iico	TOV43AT4
Jet	TR47-PHT
Orion	T10TV51A
Silca	TOV43AT4

**Blank #**

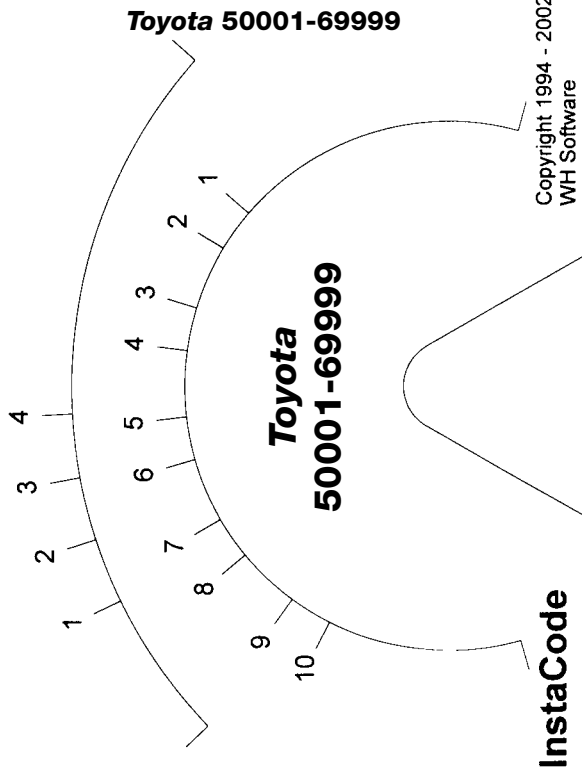
162300T10
T04TY37RP
TOV43AT4
TR47-PHT
T10TV51A
TOV43AT4

Insert key such that face of jaw meets key profile

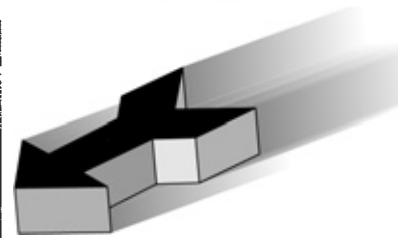
Align: Tip stop (Left Insertion)

The National Locksmith®

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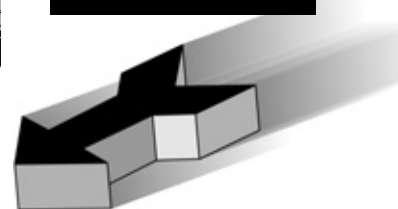
Cut Along Outside of Card and Laminate To Use



## BONUS Code Card

For the 1200CMB™

Flip 'em over for  
Silca,  
Curtis,  
Framon,  
A-1  
and  
ITL specs!



## Code Card

For the 1200PCH™

Courtesy of  
INSTA-CODE 2002™ from  
The National Locksmith



Toyota 50001-69999

<b>HPC 1200CMB™</b>			
HPC Code Card:	CF307	Cutter:	CW-47MC
Jaw:	A	Gauge:	From tip
<b>Silca Unocode</b>			
UnoCode Card No.:	1420		
<b>HPC Codemax™</b>			
DSD:	176		
Jaw:	A		
Cutter:	CW-47MC		
<b>Curtis No. 15 Code Cutter</b>			
Cam Set:	N/A		
Carriage:	N/A		
Clipper:	N/A		
<b>Framon</b>			
Cuts Start At:	404	Cutter:	N/A
Spacing:	.0551 / .0826 Alternating		
Block #:	N/A	Depth Increment:	.0255
Key Clamping:	Key aligned using left side of vice / spacing clip		
<b>A-1 Pak-A-Punch™</b>			
Quick Change Kit:	N/A		
Punch And Die:	N/A		
<b>ITL 9000 &amp; 950</b>			
ITL Manufacturer ID:	N/A		
<b>ECM 200</b>			
	N/A		

Toyota 50001-69999

<b>HPC 1200PCH™</b>			
HPC PCH Card:	N/A	Punch:	N/A
Jaw:	N/A		
<b>Silca Unocode</b>			
UnoCode Card No.:	1420		
<b>HPC Codemax™</b>			
DSD:	176		
Jaw:	A		
Cutter:	CW-47MC		
<b>Curtis No. 15 Code Cutter</b>			
Cam Set:	N/A		
Carriage:	N/A		
Clipper:	N/A		
<b>Framon</b>			
Cuts Start At:	404	Cutter:	N/A
Spacing:	.0551 / .0826 Alternating		
Block #:	N/A	Depth Increment:	.0255
Key Clamping:	Key aligned using left side of vice / spacing clip		
<b>A-1 Pak-A-Punch™</b>			
Quick Change Kit:	N/A		
Punch And Die:	N/A		
<b>ITL 9000 &amp; 950</b>			
ITL Manufacturer ID:	N/A		
<b>ECM 200</b>			
	N/A		

# KEY CODES

## Toyota, Part 7 50001-69999

**Special Note:** There has been a change in information regarding the Toyota 50001-69999 code series. The specification information and code cards have all been updated. Please disregard the previous specification info and code cards given prior to August 2002 issue. Replace with new information presented here.

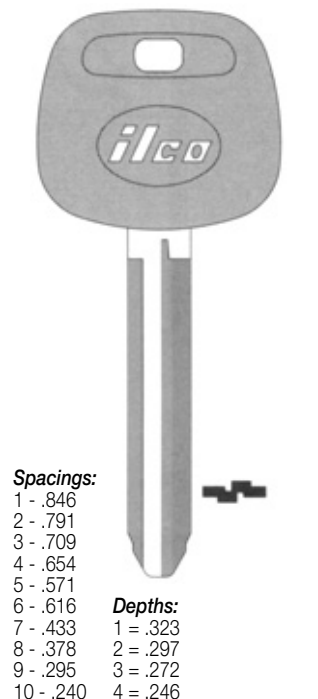
**Manufacturer:** Toyota  
**Code Series:** 50001 - 69999

**Key Blanks:**  
**Boerkey:** 162300T10  
**Errebi:** T04TY37RP  
**Ilco:** TOY43AT4  
**Jet:** TR47-PHT  
**Orion:** T10TY51A  
**Silca:** TOY43AT4

**Number of Cuts:** 10  
**M.A.C.S.:** 2  
**Key Gauged:** Tip  
**Center of First Cut:** .846  
**Cut to Cut Spacings:**  
.0551/.0826 Alternating  
**Cut Depth Increments:** .0255

**HPC 1200CMB**  
**Code Card:** CF307  
**Jaw:** A  
**Cutter:** CW-47MC  
**Gauge From:** Tip  
**HPC 1200PCH (Punch):**  
**PCH Card:** N/A  
**Punch:** N/A  
**Jaw:** A  
**Silca UnoCode**  
**Card Number:** 1420  
**HPC CodeMax**  
**DSD #:** 176  
**Jaw:** A  
**Cutter:** CW-47MC  
**Curtis No. 15 Code Cutter:**  
**Cam-Set:** N/A  
**Carriage:** N/A

**Framon #2:**  
**Cuts Start at:** .404  
**Cut to Cut Spacing:**  
.0551/.0826 Alternating  
**Block #:** N/A  
**Depth Increments:** .0255  
**Key Clamping Info:** Key aligned using left side of vise/spacing clip.  
**A-1 Pack-A-Punch**  
**Quick Change Kit:** N/A  
**Punch:** N/A  
**Die:** N/A  
**ITL 9000 & 950**  
**Manufacturer ID:** N/A  
**ECM 200**  
N/A



65501 2311342132  
65502 1211334423  
65503 2311334312  
65504 1211333444  
65505 2211333423  
65506 4311333421  
65507 2311333244  
65508 4311333232  
65509 2211332312  
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65511 2311332134  
65512 4311332132  
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65549 1211322113  
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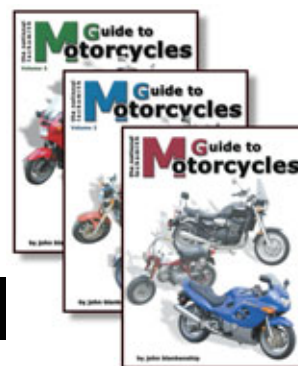
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65635 1244234421  
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65638 3444234322

## Guide to Motorcycles Vol. 1, 2 & 3

For years locksmiths have begged for a comprehensive service manual on motorcycles and its finally here!

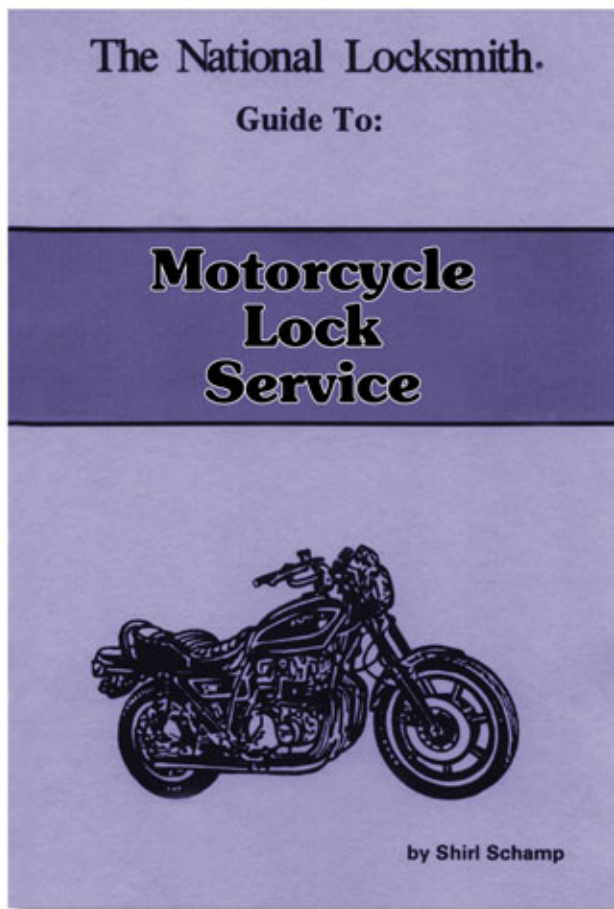


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# Motorcycle Lock Service



This book contains full details on everything the locksmith needs to know about motorcycle locks.

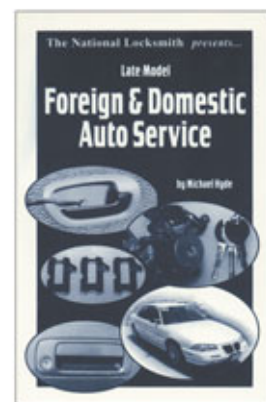
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#MLS-1

## Toyota, Part 7 50001-69999

65639	2244234321	65673	2344223421
65640	3244234311	65674	3344223312
65641	3444233434	65675	1244223244
65642	2244233432	65676	2344223232
65643	3244233422	65677	3244222334
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65645	1244233343	65679	1244222134
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65647	3344233244	65681	2344221243
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65651	3344233221	65685	3344213312
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65653	2344232344	65687	2344213232
65654	3344232334	65688	3344212334
65655	1244232332	65689	1244212312
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65661	3344232132	65695	1244211243
65662	1244232123	65696	2344211134
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65664	3244232111	65698	1243443423
65665	3444231243	65699	2343443421
65666	2244231234	65700	3343443243
65667	3244231221	65701	1243443232
65668	3444231132	65702	2343442311
65669	2244231121	65703	3343442134
65670	3244224343	65704	1243442133
65671	3444223434	65705	2343442121
65672	2244223423	65706	3343434423

## Foreign & Domestic Auto Service



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#FDAS - 1

## Toyota, Part 7 50001-69999

65707	1243434422	65741	3243343423
65708	2243434343	65742	3443343421
65709	2243434332	65743	1243343312
65710	2343434322	65744	2243343243
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65719	3243433232	65753	3243331243
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65736	2343431232	65770	2343234312
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65738	1243431132	65772	3343233422
65739	2343344423	65773	1243233421
65740	3243344312	65774	1243233312

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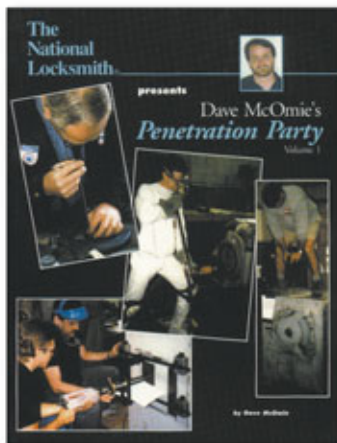
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Perfect Openings!  
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Blunders!  
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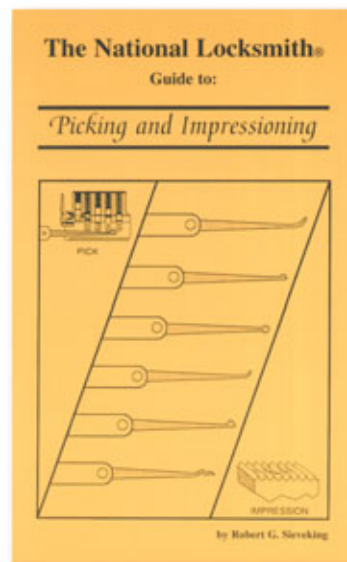
## Toyota, Part 7 50001-69999

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# Toyota, Part 7 50001-69999

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66099	3334231232	66173	3234213232	66247	2233223344	66321	1133122112
66100	3234231221	66174	2334213223	66248	1233223312	66322	3433121243
66101	2334231134	66175	2134213222	66249	4333223243	66323	2333121234
66102	2234231132	66176	1234213221	66250	3233223232	66324	2133121232
66103	2134231121	66177	1134213212	66251	2133222344	66325	1133121221
66104	1234224443	66178	4334212344	66252	1133222334	66326	3433121132
66105	1134224434	66179	3434212343	66253	3233222311	66327	2333113444
66106	4334224423	66180	3334212334	66254	2233222134	66328	2133113434
66107	3434224422	66181	3234212332	66255	1233222133	66329	1133113423
66108	3234224421	66182	2334212321	66256	3433222121	66330	3433113421
66109	2334224344	66183	2234212312	66257	2233221243	66331	2333113344
66110	2234224343	66184	2134212311	66258	1233221132	66332	2133113312
66111	2134224334	66185	1234212244	66259	4333213434	66333	1133113244
66112	1134224333	66186	1134212243	66260	3233213423	66334	3433113232
66113	4334224323	66187	4334212232	66261	2233213422	66335	2333112344
66114	3434224322	66188	3334212221	66262	1233213421	66336	2133112334
66115	3234224321	66189	2334212134	66263	4333213312	66337	1133112312
66116	2334224312	66190	2234212133	66264	3233213244	66338	3233112244
66117	2234224311	66191	2134212132	66265	2233213243	66339	2233112243
66118	2134223444	66192	1234212123	66266	1233213232	66340	1233112234
66119	1234223443	66193	4334212121	66267	4333212334	66341	4333112133
66120	1134223434	66194	3434212112	66268	3233212312	66342	3233112132
66121	4334223423	66195	3334211244	66269	2233212311	66343	2233111244
66122	3434223422	66196	3234211243	66270	1233212244	66344	1233111243
66123	3234223421	66197	2334211234	66271	4333212234	66345	4332444343
66124	2334223344	66198	2234211232	66272	3233212134	66346	3432444334
66125	2134223343	66199	2134211221	66273	2233212133	66347	3232444333
66126	1134223334	66200	1234211114	66274	1233212132	66348	2332444332
66127	3434223321	66201	1134211132	66275	4333211244	66349	2232444323
66128	3334223312	66202	3433444312	66276	3233211243	66350	2132444322
66129	3234223311	66203	2333443434	66277	2233211234	66351	1232444321
66130	2334223244	66204	2133443423	66278	1233211134	66352	1132444312
66131	2234223243	66205	1133443422	66279	4333124443	66353	4332443443
66132	2134223234	66206	3433443312	66280	3233124434	66354	3432443434
66133	1134223233	66207	2333443244	66281	2233124432	66355	3332443432
66134	3434223223	66208	2133443243	66282	1233124423	66356	3232443423
66135	1134223222	66209	1133443232	66283	4333124421	66357	2332443422
66136	3434223212	66210	3433442311	66284	3233124344	66358	2232443421
66137	3234223211	66211	2333442243	66285	2233124343	66359	2132443344
66138	2334223244	66212	2133442134	66286	1233124334	66360	1132443343
66139	2234223243	66213	1133442133	66287	4333124323	66361	3432443332
66140	2134223234	66214	3433442121	66288	3233124322	66362	3232443321
66141	1134223232	66215	2333434423	66289	2233124321	66363	2332443312
66142	3434223212	66216	2133434312	66290	1233124312	66364	2232443311
66143	3234223211	66217	1133433444	66291	4333123444	66365	2132443244
66144	2334222134	66218	3433433421	66292	3233123443		

## Picking & Impressioning



Here is the most complete book ever published on picking and impressioning locks! You will have everything you need to know about how to open almost every kind of lock that can be picked.

CLICK HERE TO LEARN MORE



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# BUSINESS BRIEFS

## **MBA USA-GSA Container Recertification**

MBA USA, Inc. has received approval directly from GSA to train students in the inspection and recertification of GSA security containers. This makes MBA one of only two companies in the world approved to offer this specialized training. Graduates are qualified to thoroughly inspect, then approve or reject GSA containers and vault doors as suitable for storage of classified material. In addition, MBA offers training in a wide variety of physical security topics including non-destructive lock entry, safe lock manipulation, and safe deposit locks.

For more information E-mail them at [mbatools@aol.com](mailto:mbatools@aol.com), or call (888) 622-5495 or (859) 887-0496.

## **Clark Electronic Class**

Clark Security Products has a new Electronic Access Control Class Series, Access 201 has begun to sweep the nation, and the inaugural class was held on June 14<sup>th</sup> at Clark's Northern California Trade Show in Reno, Nevada. Main features of the class include access control basics, terminology, differs between PC based and stand alone access control, system usage criteria, how to sell access control, and a product/system demonstration. The class features the Kaba Ilco Millennium Entry System, the IEI HubMax/MiniMax Systems, and the Visonic Prox-In-A-Box system. The class will be taught all over the US.

To request a class in your area, e-mail Eric Hirning at [access201@clarksecurity.com](mailto:access201@clarksecurity.com) or fax in your request to (619) 718-7333.

## **Schlage Computer- Managed Locks**

Los Angeles Pierce College has increased security and enhanced student, faculty and staff convenience with a "Locknetics On Board" locking system. The junior college uses Schlage Computer-Managed (CM) locks with heavy-duty mortise locksets and Locknetics LockLink™ software.

The audit trail provided by the CM locks provides Pierce College with documentation they can take to the state for funding requests. Pierce also uses the standalone locks to ascertain who has access to laboratories, such as the faculty support lab and student computer lab, which houses expensive equipment.

For more information contact: Jeff Koziol: (860) 314-5209, E-mail: [jeff-koziol@irco.com](mailto:jeff-koziol@irco.com).

## **New Access Control Website**

Security Door Controls 30<sup>th</sup> Anniversary is marked by the introduction of a new access control hardware website, [www.sdcsecurity.com](http://www.sdcsecurity.com). The website is broken into two sections: One section provides quick document access for those familiar with SDC product applications. The main product section includes product overviews, full color photos and installation illustrations to assist with application choices. All access product datasheets are available in HTML format for lightning fast viewing and downloading for those with slow 56k modems; PDF formatted files are available for those with fast cable and DSL lines to provide high quality datasheet, price list and installation instruction reprints.

## **IR Recognition Systems Partners with Access Hardware Supply**

Access Hardware Supply is now handling IR Recognition Systems biometric HandKey II, hand geometry readers.

Among the lines already distributed by Access Hardware Supply are Schlage CM locks, Von Duprin CM993 exit trim and Locknetics universal controllers. The same LockLink™ and LockLink™ Express access control management software used to program these products also programs Recognition Systems' new HandKey CM hand geometry readers. With a laptop or PDA, the administrator can go to a door, plug in the interface to the HandKey CM, add or delete users, determine which users can have access to specific doors at specific times throughout the day, and download audit trails of who has been through the door and when.

## **Expanded Catalog Available from Zero**

Zero International's catalog of door and window sealing systems continues to grow to accommodate ongoing product line enhancements, as well as an expanded lead section on Zero's renowned sound control solutions. The 50-page new edition features new



product offerings in several categories, including self-adhesive and kerf frame door seals, meeting stiles and sweeps for glass doors, and child protection safeguards.

For a catalog call: (800) 635-5335; Fax: (800) 851-0000; E-mail: [Zero@zerointernational.com](mailto:Zero@zerointernational.com); Web: [www.zerointernational.com](http://www.zerointernational.com).

## **JLM Wholesale Now Selling Impro Products**

JLM Wholesale is now selling Impro products! Impro Distribution USA supplies a full range of Impro proximity access control systems, for any application from single door to large multi-door, multi-site systems.



For more information on Impro proximity access control systems log on to [www.jlmwholesale.com](http://www.jlmwholesale.com) or call (800) 522-2940.

## **Clark DC Branch Relocates**

The Clark Security Products DC branch formerly in Lanham, has moved into a new 31,000 square foot location, which houses their office building, warehouse, and will call area. The location is 12006 Plum Orchard Drive, Silver Spring, MD 20904. The new location offers 21,000 square feet of warehouse space, which makes this location the second largest state of the art distribution facility out of the 13 Clark locations.

For more information about this location, feel free to call the branch at (301) 572-1901 or stop by and see them! **TL**

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Industry Products  
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# TEST DRIVE!

## DESCRIPTION:

The Magnetic Clip Remover (MCR) by McCoy Productions is a tool designed to remove automotive door lock retaining clips without removing the door panel.

## CONTENTS:

The Magnetic Clip Remover kit includes:

- 1 - 20" x 5/16" diameter Stainless Steel Clip Removal Rod
- 1 - 8" x 1/4" diameter Stainless Steel Clip Removal Rod
- 1 - Rubber Coated Magnet
- 1 - Finished Wood Door Wedge
- 5 - Sheets of Round Black Plug Labels
- 5 - Horseshoe Door Clips
- Instruction Sheet

## OPERATION:

The Magnetic Clip Remover can be used to remove both vertically and horizontally mounted door lock clips, on door locks that are separate from the door handle and use the common horseshoe style door clip.

To begin, open the door to be worked on and lower the window. Gently insert the wooden window wedge into the door, making enough room to access the door lock clip with the chosen Clip Removal Rod.

In corrosive environments, spray a small amount of lubricant on the back of the lock and lock retaining clip. Letting it soak for a minute will assure that the clip will come off easier.

To protect the vehicle's surface from scratches, wrap a clean shop rag around the magnet. Despite its rather small size, this magnet is extremely strong.

Gently place the magnet in rag on the outside door panel near the lock

## MAGNETIC CLIP REMOVER TOOL BY MCCOY PRODUCTIONS



and over the area where the door lock retaining clip is.

Insert the chosen Clip Removal Rod into the door and hook the door lock retaining clip. Slide the clip off of the lock. In some vehicles, the lock retaining clip may include small barbs or tabs that make removal difficult. Be patient and use the Removal Rod to work the clip back and forth until the clip slides off of the lock.

Once the clip is completely off of the lock, the clip will jump to the magnet. It will hold the clip firmly to the side of the door cavity, preventing it from falling to the bottom of the door. Remove the lock and repair or replace.

Once complete, reinsert the lock and use the Clip Removal Rod to push the door lock retaining clip back into position and seated on the door lock. Should the lock retainer clip fall into the door, use the magnet to find the clip at the bottom of the door, and work it back up into position. If necessary, use the replacement clips that are provided.

## BENEFITS:

The Magnetic Clip Remover makes it possible to remove and service or replace the door locks on many of today's vehicles, without the need for interior door panel and trim removal. Although quite simple in concept and design, this one tool can save not only a great deal of time and

aggravation, but also eliminates the risk of damaging interior door panel and trim components during panel removal.

## RECOMMENDATIONS:

For all of its simplicity, McCoy Production's Magnetic Clip Remover is definitely one to add to the toolbox. The instructions are well thought out and presented. Several alternatives are shown for removing hard to access horizontal lock retainer clips.

This tool is ideal not only for removing locks that need to be serviced, but also for removing locks for code retrieval.

## PRICE:

The Magnetic Clip Remover tool is \$85.00 which includes: two clip removal rods; one rubber coated earth magnet; one wood door wedge; 5 sheets of round black plug labels; five replacement horseshoe door clips and an instruction sheet.

*For more information or to order The Magnetic Clip Remover contact:*

**Lockmasters Inc.**

800-654-0637, (606) 885-6041

Fax: (606) 885-7093

E-mail: [salesinfo@lockmasters.com](mailto:salesinfo@lockmasters.com)

Web: [www.lockmaster.com](http://www.lockmaster.com)

**Tech-Train Productions**

800-356-0136, (850) 476-7197

Fax: (850) 476-7410

E-mail:

[techtrain@techtrainproductions.com](mailto:techtrain@techtrainproductions.com)

Web: [www.techtrainproductions.com](http://www.techtrainproductions.com)

Circle number 319 on Rapid Reply.



## IN SUMMARY:

**DESCRIPTION:** The Magnetic Clip Remover is designed to remove retaining clips without removing the door panel.

**PRICE:** \$85.00

**COMMENTS:** This tool saves a great deal of time and aggravation, and eliminates the risk of damaging interior door panel and trim components.

**TEST DRIVE RESULTS:** The Magnetic Clip Remover is definitely one to add to the toolbox.